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ABSTRACT

Objectives of a three-phase New York State study were (1) to test the feasibility of an institutional sampling survey for providing descriptive data about the nature and scope of continuing education in postsecondary degree-granting institutions, (2) to test the applicability of the Focus Delphi research method for assessing the priority educational needs and goals for degree-granting postsecondary institutions, and (3) to evaluate the feasibility of integrating the information-gathering system for postsecondary education into the State Education Department management information system. In the institutional survey descriptive information was sought concerning the kinds of continuing education opportunities available, the audiences served, the number of participants, and the subject matter areas studies. The methodology consisted of constructing and administering a questionnaire to a sample of university and college personnel, analyzing the data, and reporting the findings. The Delphi study sought the responses of policy advisors, continuing education administrators, faculty members, and clients to alternative adult and continuing education goals and strategies. The phase three task involved becoming familiar with the management information system of the state education department and evaluating its compatibility with the data collection procedures used in the two preceding phases. (Results of each phase are reported separately and a final chapter synthesizes them into ten selected policy issues in continuing education, e.g., expansion of specific types of course offerings and future research needs.) (JT)

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A STUDY OF THE FEASIBILITY OF TWO DATA-COLLECTION TECHNIQUES FOR DETERMINING PRESENT ACTIVITIES AND PERCEIVED PROGRAM NEEDS IN CONTINUING EDUCATION AND EXTENSION IN DEGREE-GRANTING POST-SECONDARY INSTITUTIONS IN NEW YORK STATE

U S DEPARTMENT OF HEALTH,
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by

Harlan G. Copeland, Michael Folk and Stuart A. Sandow

December, 1974

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CHAPTER I

INTRODUCTION

Background of the Study

In the division of Federal and state functions in the United States Constitution, the responsibility for providing education was one of those functions to be assumed by the states. In New York State, the Board of Regents of the University of the State of New York is charged with the responsibility for the development of the total educational system in the State. As part of this role, the Regents are in a unique position to effect an integrated, articulated system of education for all citizens throughout the State.

In 1964, the New York State Legislature directed the Regents to prepare every fourth year a comprehensive plan for the orderly development of higher education in the State. For the purposes of this plan, the term "post-secondary education" was used because post-secondary education is a broader concept that is more representative of actual practice than is the term "higher education." Post-secondary education is considered to be any and all systematically planned instructional activities offered by colleges and universities, and by other institutions where the purpose of the instruction is to facilitate learning beyond the secondary education experience.

In order to implement, develop, and expand such a system, it is necessary to plan on a comprehensive, coordinated, statewide basis. Historically, much of the legislation which has been mounted to solve educational problems has been framed in a crisis orientation.

It is imperative that New York State continue its planning in a comprehensive way, taking cognizance of learning as a lifelong process which is compartmentalized. A new approach--a new effort--is needed that focuses on a system of education that facilitates lifelong learning. Such a system should delineate the nature and relationships of the parts to the whole in order that all segments of the system develop in concert with the others.

In establishing any system, the quality of planning outputs will vary in direct proportion to the quality of informational inputs and the quality of management of those inputs. In order to answer the question of where a given system ought to be at some time in the future, it is useful to find out what is going on at present. Such a strategy of data-gathering, and goal-definition recognizes the inextricable nature of the two processes. In other words, goals--as guides to future action--are based on an appraisal of where a program is. The data are also useful for formulating alternative goals and strategies for achieving goals.

Higher and professional education in the State can relate to this total system of education by: (1) formulating objectives for all post-secondary education--including continuing education--and relating these objectives to those of other components of the whole educational system; (2) developing a system for collecting information, on a continuing basis, on all aspects of post-secondary education; and (3) expanding and developing a comprehensive Master Plan for all post-secondary education in New York State.

A commitment to learning as a lifelong process, and the growing acceptance of the need for a system of education that facilitates lifelong learning for all citizens of the State presented a new challenge to post-secondary education institutions. Based on national studies, it can be safely assumed that more people are involved in part-time educational activities for the purpose of continuing their education than are involved in the undergraduate and graduate programs in colleges and universities. More than one of five adults (approximately 25 million persons) was active in some form of organized adult education or independent study during the twelve-month period from June, 1961 to June, 1962. An additional 2 percent of American adults (2.5 million persons) were full-time students.[1] An adult was defined as all persons 21 years of age and older, and all persons under 21 who were married and/or heads of households.

These learning activities took many forms: courses, conferences, seminars, lecture series, workshops, independent study, correspondence, personal counseling, and mass media programs. Only a small percentage (1 to 23 percent) of the learning activities involved academic credit, whereas a very large percentage (56 to 76 percent) appears to be planned and directed by the learner himself.[2]

Yet the coordination of post-secondary learning activities for adults is non-existent and the needs of many go unattended. We can expect in the near future that the many adults engaged in continuing learning activity will rightfully expect the publicly-supported post-secondary educational institutions to meet their needs.

What kind of response to these requests for adult learning opportunities can be expected from the public post-secondary educational system? Traditionally, public education has responded in two ways: (1) by providing programs for adults that can be self-financed by adult students, and (2) by permitting adults to enroll in programs (at post-secondary institutions only) that were designed for full-time, in-residence youth whose primary responsibility was to attend college. This approach has resulted in a program with the following characteristics. First, education for adults is viewed as a marketable commodity rather than as a public right. Second, the audience for adult education is restricted to those who have the ability to pay. Third, the subject matter for adult education is restricted to "that which will sell." Fourth, the adult student interested in academic credit programs has traditionally had to conform to inconvenient time and space restrictions. Fifth, education for adults is considered outside the primary mission of the educational institutions and thus expendable. Sixth, entrepreneurship is rewarded, competition with other sub-systems is fostered, and cooperation among sub-systems is discouraged.

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[1] John W. C. Johnstone and Ramon J. Rivera, Volunteers for Learning (Chicago: Aldine Publishing Company, 1965), p. 1.

[2] Allen M. Tough, The Adult's Learning Projects (Toronto, Ontario: The Ontario Institute for Studies in Education, 1971); Patricia Mary Coolican, "The Learning Style of Mothers of Young Children" (Ph.D. dissertation, Syracuse University, 1973), p. 128.

It is becoming increasingly clear that the public education system in New York State must provide leadership for--rather than merely respond to--the adult's interests in learning. Within post-secondary continuing education, the following tasks need to be accomplished if the Regents and the State Education Department choose to provide leadership at this level in New York State as part of their total system responsibilities:

1. A long-range master plan for post-secondary continuing education must be developed and tied in closely to the developing extant plan for all post-secondary education.
2. Information about the nature of ongoing continuing education activities and the perceived continuing education needs and desires in degree-granting post-secondary institutions is requisite for determining the goals and objectives of a master plan for all post-secondary education. This information and the process by which it is generated need to be integrated within the management information system presently being

developed by the Department.

3. In order to develop a comprehensive, long-range master plan for all post-secondary continuing education, a study of all post-secondary level continuing education activities in non-degree granting sites in New York State is needed. This would provide information about present continuing education activities and anticipated needs in continuing education in institutions such as business, industry, voluntary agencies, and labor organizations.

It is significant, therefore, that the Bureau of Special College Programs (now the Bureau of Post-Secondary Continuing Education) has been involved in a systematic study of the opportunities for, and needs in, post-secondary continuing education in the State. Beginning in 1964, when financial support was requested from the State Legislature, the Bureau has been committed to the concept of planning a comprehensive and coordinated system of education for adults. In April, 1971, the Bureau prepared a plan for providing leadership for developing a post-secondary continuing education program in the State.[1] One way that the Bureau began to implement its plan was by providing financial support for some systematic study of the opportunities for, and needs in, post-secondary continuing education in the State.

Origin of the Study

In Federal Fiscal 1971 the State Advisory Council on Continuing Higher Education (now the State Advisory Council on Post-Secondary Continuing Education) recommended that the Bureau of Special College Programs of the

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[1] Robert E. Williams, "A Plan to Provide Leadership for the Full Development of Post-Secondary Continuing Education in New York State." Unpublished manuscript, Bureau of Post-Secondary Continuing Education, New York State Education Department, April, 1971.

State Education Department (SED) invite research proposals related to the three above-mentioned tasks. The research findings would be used to assist the Department in making decisions regarding policy for post-secondary continuing education, for the educational needs of New York's adult citizens, for the priority goals for continuing education for post-secondary educational institutions, and for data-collection strategies.

In considering the magnitude of all post-secondary continuing educational activity, it was recommended that a research project of two phases be conducted. In Phase I, the major purpose would be to describe the continuing education activities conducted by, and the perceived continuing education needs and goals of, degree-granting post-secondary educational institutions in New York State. An ancillary purpose would be to integrate this information and the process into the Department information system. The objective in Phase II of the project would be to extend the project objectives of Phase I to include all other institutions conducting post-secondary continuing education activities in the State.

The State Advisory Council on Continuing Higher Education recommended to the Board of Regents of the University of the State of New York that Phase I of the project be conducted by Syracuse University and the Educational Policy Research Center, Syracuse University Research Corporation. Subsequently, the Board of Regents of the University of the State of New York approved the project entitled, "Survey of Present Activities and Perceived Program Needs in Continuing Education and Extension in Degree-Granting Post-Secondary Institutions in New York State."

Purposes of the Project

As has been stated, the general purpose of the project was to facilitate the capacity of the SED and representatives of post-secondary educational institutions to conduct comprehensive planning of continuing education activities in the future. Specifically, the project was developed to provide three kinds of information that was needed for the planning process: (1) what is presently going on in continuing education in post-secondary degree-granting educational institutions in New York State, (2) how to incorporate descriptive information about continuing education into the Department information storage and retrieval system, and (3) what are the priority continuing education needs and goals that can be addressed by degree-granting post-secondary institutions.

In the process of working out the procedures to obtain these data, it became evident that information was also needed about the efficacy of existing procedures for collecting these data. Thus, it became necessary to refine the original objectives into more modest ones because of the complexity and diverse nature of the State's post-secondary education institutions, the dearth of research on alternative continuing education needs-assessment strategies, and the finite financial resources.

The three modified objectives which evolved were:

1. To test the feasibility of an institutional sampling survey for providing descriptive data about the nature and scope of continuing education in post-secondary degree-granting institutions.
2. To test the applicability of the Focus Delphi research method for assessing the priority educational needs and goals for degree-granting post-secondary institutions.
3. To evaluate the feasibility of integrating the information-gathering system for post-secondary education into the State Education Department Management information system.

Because a serious effort was made to pursue the initial intentions, the institutional survey and Focus Delphi studies provided data about the nature and scope of continuing education and perceived needs for continuing education in degree-granting post-secondary educational institutions. While a definitive statement on the needs for post-secondary education did not emerge from the study, the reader can find some hypotheses and/or tentative conclusions that were uncovered from the data that were obtained.

Methodology

Three data collection tasks--one for each of the three areas of information identified on page 7--were planned to obtain the needed information. Each task is discussed in terms of its purpose, the methodology employed, the activities involved, and the persons providing leadership. Two additional tasks supplemented the data-collection activities. A listing of the individuals involved in the project is provided in Appendix A.

Concepts or terms requiring an explanation of the sense in which they are used will be defined as they appear in the narrative. A list of the definitions of basic terms used in this report is also provided below.

Post-secondary education--Any and all systematically-planned instructional activities offered by colleges and universities, and by other institutions where the purpose of the instruction is to facilitate learning beyond the secondary education experience. This would include both full-time and part-time students.

Post-secondary continuing education--Any and all activities of an educational nature engaged in by other than full-time undergraduate and graduate students who are enrolled in degree-credit, non-credit, certificate, or diploma curricula.

Goals--Targets, or ends, to be achieved that guide future action. They may be educational or non-educational, general or specific, and long-range or short range in nature. Goals, purposes, and objectives are treated as synonyms in this report.

Focus Delphi--A survey technique that collects the perceptions of several interested populations about an array of goal statements and holds the group responses separate for comparison over several reiterations.

Task I - The Institutional Survey

The purpose of the survey of continuing education activities in degree-granting post-secondary institutions was to determine the value of a survey questionnaire for providing descriptive data concerning the nature of continuing education activity in these institutions. Descriptive information was sought concerning the kinds of continuing education opportunities available, the audiences served, the number of participants, and the subject matter areas studied. The population included all persons providing instruction in post-secondary educational degree-granting institutions in New York State. The methodology consisted of constructing and administering a survey questionnaire to a sample of university and college personnel over a period of fifty-two weeks, analyzing the data, and reporting the findings. The results of this phase of the project are reported in Chapter 2 of the report.

The leadership for this phase of the project was provided by Harlan G. Copeland and Roger Sorochty, Syracuse University; and James Byrnes and Michael Folk, Educational Policy Research Center.

Task II - The Focus Delphi Survey of Needs, Goals and Priorities

The purposes of the field assessment of goals, priorities, and needs for continuing education activities were to test the applicability of the Focus Delphi research method for assessing needs and goals in continuing education, and to illustrate the range of perceptions of interested publics concerning reform and innovation in post-secondary education programs and institutions. The Focus Delphi is a newly-developed survey instrument that was devised to collect the perceptions of several different populations about an array of goal statements.[1] The responses of the different groups--while kept separate for comparison purposes--are inserted in the succeeding versions of the instrument over three or four reiterations.

The responses of various interested publics to alternative adult and continuing education goals and to the strategies for achieving them were sought. Information was also collected about the respondents' estimates of the value of continuing education goals to self and to post-secondary education, and their perceptions of the groups who had the power to enhance or retard the achievement of specific goals.

Four publics interested in adult and continuing education were surveyed through three successive mailings of questionnaires. The publics queried were policy advisors, continuing education administrators, faculty members, and clients. The results of each round were reported back to the participants in the successive rounds. The findings from this phase of the project are reported in Chapter 3 of this report.

Stuart A. Sandow, Educational Policy Research Center, designed the instruments, analyzed the data, and reported the findings assisted by James Byrnes, Michael Folk, and David Mathieson, all with the Educational Policy Research Center.

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[1] Stuart A. Sandow, Educational Policy Formulation: Planning With the Focus Delphi and the Cross-Purpose Matrix (Syracuse, New York: Educational Policy Research Center, Syracuse University Research Corporation, 1972) p. i.

Task III - Evaluation of the Compatibility of the Data-Collection System with the Management Information System

The need for a continuing data-gathering system provided the purpose for this task. The task involved becoming familiar with the management information system of the State Education Department, and evaluating its compatibility with the data-collection procedures used in the two preceding tasks. The findings from this evaluation will be reported in Chapter 4 of this report.

Michael Folk, Educational Policy Research Center, provided the leadership for this phase of the project assisted by James Byrnes, Educational Policy Research Center.

Supplemental Tasks

In order to assist the State Education Department staff in future comprehensive planning efforts, representatives of post-secondary educational institutions and public agencies were invited to participate on a steering committee. The purposes of the steering committee were to provide informational and advisory inputs into the general planning and decision-making processes of the project, and to assist colleagues in other institutions to become aware of the need for planning and for collecting data pertaining to the instructional activities of college and university personnel.

Alexander N. Charters, Syracuse University, and Warren L. Ziegler, Educational Policy Research Center, provided the organizational leadership for convening the committee, and involving the committee members in providing advisory and informational inputs into the general planning of the project.

A fifth task--management of the project--was shared by several persons associated with the project. Those providing leadership for the other four specific tasks handled any management aspects associated with the task including soliciting advice and consultation from specialists in higher education, continuing education, and research. Harlan G. Copeland, Syracuse University, served as overall project manager.

Organization of the Report

The background of the project and the general purposes and methodology of the study have been reviewed in this first chapter. The findings pertaining to the institutional survey are reported in Chapter 2. The Focus Delphi survey of needs, goals, and priorities is described and discussed in Chapter 3. Chapter 4 is devoted to the issues associated with a management information system for continuing education. The final chapter is devoted to the implication of the findings from the three studies associated with the project.

Since both of the areas of post-secondary education and adult/continuing education in the United States have been undergoing extensive change since the middle 1960's, a note about the time frame of this study is appropriate. As indicated earlier, efforts directed toward comprehensive planning of post-secondary continuing education had their genesis in New York State in 1964. The grant for this specific study was made in June, 1971. The data for the Focus Delphi phase of the project was collected between January and May, 1972; the instructional survey data were collected between March, 1972 and March, 1973. A separate report of the Focus Delphi study was issued by the Syracuse University Research Corporation in July, 1972. The initial draft of the total study report was completed in December, 1973. The subsequent period of time has been used to review, edit, and revise the manuscript and publish the report.

Thus, the narrative describing the background and implementation of the study reflects the context of the time frame in which the study was conducted. References to certain developments relevant to the study that have occurred since the data collection period will be noted, but reserved for the final chapter.

CHAPTER II

A SURVEY OF CONTINUING EDUCATION ACTIVITIES IN DEGREE-GRANTING POST-SECONDARY INSTITUTIONS

In order that adult and continuing education planning personnel could have information about the nature of continuing education in New York State, and about useful techniques for determining the same, a survey of instructional activities in degree-granting educational institutions was conducted. The purposes of this chapter are (1) to describe the data-collection and the data-analysis processes used, (2) to present selected descriptive data concerning the scope and nature of instructional activities in post-secondary degree-granting institutions, and (3) to illustrate ways that descriptive data about current activities can be used for long-range planning for continuing education in New York State.

Need for the Study

In a 1971 paper, the continuing education staff of the Bureau of Special College Programs (now the Bureau of Post-Secondary Continuing Education) emphasized the need for more information as a basis for realistic, long-range planning for post-secondary continuing education in New York State.[1] Various socio-cultural forces affecting modern society and the services needed from educational institutions mandate new and additional kinds of necessary information for policy planners in continuing education. Among the conditions which require a recurring assessment of continuing education are:

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[1] Robert E. Williams, "A Plan to Provide Leadership for the Full Development of Post-Secondary Continuing Education in New York State." Unpublished manuscript, Bureau of Special College Programs, New York State Education Department, Albany, N.Y., 1971.

1. An increasingly greater number of people of post-high school age who desire or need some form of higher continuing education. This is reflected in trends such as: the rapidity of social and technological change; the importance of credentials in society; the emergence of compulsory education for purposes of re-certification and re-licensure; and the increased recognition that knowledge is a means of gaining some control over one's destiny.
2. Higher education institutions face serious financial problems in the immediate future.
3. The evolving needs of society are requiring, both quantitatively and qualitatively, an adult population that is trained in a specialized fashion and is educated in a generalized fashion.
4. The educational needs of various neglected populations in society--namely disadvantaged adults, women, senior citizens, minority groups, migrants, adults in mental and correctional institutions--have not been served adequately by higher education and other educational institutions.

The lack of adequate information about the current status of post-secondary continuing education in New York State has hampered efforts to develop a comprehensive Statewide plan for post-secondary continuing education. In the past, a major data collection effort has been conducted by the U.S. Office of Education through the Higher Education General Information Survey (HEGIS). This survey has provided data on the numbers of registrations in three credit categories (i.e., degree-credit, non-degree credit, and non-credit) by academic subjects and by ten types of instruction (e.g., class, short course, lecture series, broadcast TV, etc.).

An additional source of information has been the joint reports prepared by the Association of University Evening Colleges (AUEC) and the National University Extension Association (NUEA).[1] These reports have provided data on enrollment statistics for AUEC and NUEA member institutions for three methods (classes, conferences, and correspondence study), and for the colleges within the university. While certain kinds of these data have been reported since the 1960-61 fiscal year, the reporting institutions have been limited to those member institutions of AUEC and NUEA.

A third major source of information about continuing education activity that has a bearing on policy for post-secondary continuing education is the New York Cooperative (Agricultural) Extension Service, which has developed a management information service in collaboration with the other forty-nine states and the U.S. Department of Agriculture. There are five components of the state system: plan of work, plan of work projection, activity report, progress report, and personnel.

The plan of work identifies the major program thrusts planned for the coming fiscal year and indicates resource allocation by purpose, subject, and type of audience. The plan of work projection identifies resource allocation for the subsequent years by purpose. The activity report indicates resource expenditures by purpose, subject, and audience. The progress report is a qualitative assessment of achievements. The personnel component is a current inventory of professional staff.

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[1] See, for example, a report prepared by the Joint AUEC-NUEA Committee on Data and Definitions, Program and Registrations, 1971-72 (Norman, Okla. and Washington, D.C.: The Association of University Evening Colleges and The National University Extension Association, n.d.).

This reporting system was developed specifically to accommodate the operating procedures, traditions, and philosophy of the Cooperative Extension Service. The data generated apply only to this subsystem of continuing education, and it is questionable whether the specialized data-collection design would be applicable to other programs of adult education.

The need for additional information about what was going on in post-secondary continuing education was a concern shared with several other individuals and organizations. Mention will be made only of the effort that was most prominent and visible at the outset of the study; i.e., that of the Commission on Non-Traditional Study. The Commission, through the support of the Carnegie Corporation, the College Entrance Examination Board, and the Educational Testing Service, was beginning in 1971 and 1972 to acquire information and to identify and study the issues.[1]

Thus, while data about continuing education activity in New York State did exist, the information was limited primarily to enrollment statistics in the various subject-matter areas. It was encouraging, however, to note the increasing interest in acquiring more information about adult learners and educational programs serving adults that was developing on the national level and in the Bureau of Post-Secondary Continuing Education in 1970-71.

There was also an increased capability in management information systems related to adult continuing education, such as in Cooperative Extension, but the data pertain to the mission of that particular organization. In summary, the existing data-collection systems provide information about enrollments in post-secondary continuing education courses and programs only. Such data have thus been found insufficient for comprehensive long-range planning in post-secondary continuing education. Knowledge about the number of enrollments explains very little about characteristics of the adult students and about the nature of the instruction that is offered.

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[1] Samuel B. Gould and K. Patricia Cross, eds., Explorations in Non-Traditional Study (San Francisco, Calif.: Jossey-Bass, Inc., 1972), p. ix.

Purpose of the Study

In addressing the need to supplement the existing information (i.e., enrollment data) about the current status of continuing education, three general questions emerged: What specific substantive information would be useful in describing what is now going on in post-secondary continuing education? What data-collection techniques are most appropriate for providing a comprehensive view of post-secondary continuing education in New York State? What magnitude of post-secondary continuing education should be examined?

As stated previously, the magnitude of the investigation was limited to a stratified sample of continuing education activities conducted by 45 degree-granting post-secondary educational institutions from a total of 229 colleges and universities at the time of the study.

In discussions with persons responsible for policy and planning for post-secondary continuing education in the State Education Department, specific needs for certain kinds of information were identified. These people desired to supplement the existing data on enrollments with additional knowledge about who was being served: What are these continuing education students like? Also, information was desired concerning how, when, and where continuing education offerings were provided. Another major interest was in finding out how present offerings were being financed.

Using these expressions of need, the study began with the primary purpose of describing the nature and scope of continuing education activities in post-secondary educational institutions in the State. A valid and reliable description of the post-secondary continuing education activities and the participants involved would assist in the formulation of a Statewide Plan by answering such questions as: Whom should post-secondary continuing education serve? What should be the priorities for post-secondary continuing education in both the short-range and the long-range future? What changes in post-secondary continuing education offerings should be made? What policies should be advocated for post-secondary continuing education?

Neither the planners nor the research team members expected the study findings to provide direct answers to these questions. Rather, the findings would be used to answer "Where-are-we-now?" types of questions. Thus, the planners would be more assured of a valid starting point for asking questions relating to "What should/ought post-secondary continuing education be in five years?" "In ten years?"

Attention was also directed to methodological concerns. Certain guidelines for the data-collection system were suggested. Representatives of the SED indicated a desire for the data-collection system to be integrated eventually into a management information system being developed by the SED. This criterion imposed a standardized format for the responses so they could be computer-stored. It was also desired that the data could be generalized for all post-secondary continuing education.

In the process of working on the methodological issues, it became evident that the most pressing problem involved the development of an effective and efficient system for collecting data through post-secondary educational institutions about their continuing education programs and clientele. Thus, it became necessary to modify the original goals of the study and focus on furthering our knowledge about appropriate data-collection procedures for determining what is going on in post-secondary continuing education.

Therefore, the primary purposes of the institutional survey, as with the Focus Delphi, became:

1. To test the feasibility of an institutional sampling survey for providing descriptive data about the nature and scope of continuing education in post-secondary degree-granting institutions
2. To test the appropriateness of selected techniques for analyzing the data
3. To illustrate how descriptive data obtained could be used for policy formulation and for long-range planning.

Since the data-collection effort was implemented to fulfill the initial intentions of the project, a secondary purpose of the study was to seek answers to questions such as:

1. Who is presently being served by degree-granting post-secondary education institutions?
    a. What is the age, sex, race, and educational level of the people who are participating at the present time?
    b. What prerequisites are required, if any, for participation?
2. Who is not presently being served who might be?
3. For those being reached by degree-granting post-secondary education institutions, how are they being served?
    a. What is the type, nature, and duration of the offerings?
    b. Where offered?
    c. By whom?
4. How are the present offerings being financed?

Design of the Study

Designation and Selection of the Sample

Three sources of information--enrollments, an adult learner's total educational activity, and instructional activities--were considered as having the potential of providing a standardized measure of participation in post-secondary continuing education activity. There are advantages and limitations associated with collecting each of these types of information. These three sources also differ in the extent of information provided about the nature and scope of post-secondary continuing education.

Traditionally, an enrollment has been the unit of analysis for describing participation in, and formulating policy about, higher continuing education activities. An enrollment may be defined as "the act of participation in a single program." While data about the numbers of enrollments in courses and programs are usually available, they are limited to providing answers about the numbers of individuals being served by a given program, unit, or institution. These course or program enrollment statistics reveal nothing about who participates in post-secondary continuing education and why.

Although participants usually provide some information about themselves on registration forms, these data are seldom compiled and reported. Even when available, only a minimum amount of additional information is known about the participants, and very little is known about the nature of the instructional activity.

Furthermore, it is difficult to get one standardized operational definition of an "enrollment." Institutions are still in the process of differentiating between full-time and part-time students; some continuing educators would even question whether this distinction serves any valid purpose as far as adult learning is concerned.

The second measure of participation--an individual's entire educational activity--is a new, and most revealing, approach to understanding how he or she engages in continuing learning activity. This research approach focuses on the learning activities of individuals--rather than on an analysis of the clientele of a specific institution or program. All learning activities undertaken by an adult during a certain period of time--such as one year--are studied. Thus, an individual's learning may involve many different activities such as attending a training program at work, participating in a program sponsored by a professional association, attending a lecture series at a museum, taking part in a discussion group at church, teaching himself or herself something, as well as taking a course. Thus, this approach is effective in determining the nature and scope of adult learning activity since it is not restricted to methods, subject-matter areas, sponsoring institutions, or locations.

If this research approach were used, the adult population of the State would become the population for the study. Such studies have customarily employed both survey and interview techniques in the data-collection process. The interview technique provides the opportunity to probe for learning experiences that are not immediately recalled by the subject. The limitations of surveying adult learners lie primarily with the expense associated with collecting the data, and the amount of time required for dispelling concerns about invading a person's privacy.

The instructional activity of faculty and staff of degree-granting post-secondary institutions in New York State was considered a third source of information about participation in educational activities that could be useful in formulating policy for post-secondary continuing education. An instructional activity was defined as any activity which has the DIRECT purpose of improving the knowledge, skill, or sensitivity (attitude) of an individual, group, or mass audience. Examples would include classes, workshops, tutorials, lectures, and presentations on mass media provided by college and university staff.

The advantages of using instructional activities as the unit of analysis for the study were that: (1) data could be obtained directly about the nature and scope of continuing education offerings in terms of the methods used (the "how"), the content areas (the "what"), and the place and time of offerings (the "when" and the "where"); (2) it was anticipated that information about the individuals (the "who") participating in the activity and about the methods of financing could also be obtained from the instructor; (3) it would also be possible to identify the faculty and staff providing instructional activities in post-secondary institutions; and (4) it should be more economical to study "instructional activities" of faculty than to review the "total educational activity" of New York State adults because institutional affiliation provided an access for identifying faculty and staff, whereas no organizational membership list or mailing list was available that included all adults residing in the State.

At least two limitations were foreseen in studying instructional activity: (1) standardized techniques for obtaining the desired data did not exist, and (2) it would be impossible to collect data about all instructional activity in post-secondary educational institutions.

The study staff felt that the advantages exceeded the limitations. Thus, the instructional activity provided by post-secondary educational institutions was selected as the principal unit of analysis of the study. Two assumptions relevant to this decision were also made by the staff. First, it was assumed that the information collected about instructional activities had the potential for being collected and aggregated within each post-secondary institution at some future time. Second, it was also believed that college and university faculty would cooperate in providing the information requested.

The magnitude of instructional activities in post-secondary educational institutions dictated that a sampling technique be used. The theory underlying sampling procedures is based on the assumption that a small proportion may be drawn from a total population of events in such a way that the findings for the smaller proportion (or sample) closely approximate the findings for the entire population.[1]

At the time of the study, there were 229 post-secondary educational institutions employing approximately 37,900 full-time faculty members. It was also noted that instruction was offered throughout the year. Thus, it seemed necessary to sample both instructors and time periods.

In order to limit the scope of the study, a two-stage sampling procedure was employed. First, a stratified sample of the faculty and staff from all degree-granting post-secondary education institutions was drawn. Second, each person was assigned one to five reporting weeks according to a specified procedure. The detailed procedure for selecting the faculty sample is described in Appendix B.

In summary form, the faculty-sampling procedure involved four general steps:

1. Determining the population (i.e., the number of full-time and part-time staff for each of the 229 institutions)
2. Dividing the population into a number of parts (or strata) and subparts (clusters)

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[1] William L. Hays, Statistics for the Social Sciences, 2d ed. (New York: Holt, Rinehart and Winston, Inc., 1973), pp. 72-75.

3. Selecting the sample
4. Identifying the individuals who belonged to the clusters comprising the sample.

Since the number of full-time and part-time staff in post-secondary institutions (the population) was unavailable, it was estimated by multiplying the number of full-time faculty at each institution by three. This was done to provide an estimate of part-time faculty, one-time faculty, and professional staff members as well as full-time faculty who could possibly provide instructional activities.

The population was divided into a number of parts and subparts (clusters) so that a stratified sample could be drawn. Such a scheme is useful for insuring a representative sample, and it may reduce the error in estimation.[1] The population was stratified as follows. First the estimated number of full-time staff in each institution was divided into groups, or clusters, of 20 each. Second, the clusters were then consolidated into 28 groups or strata (called zones) of 200 clusters each.

Two samples were drawn so that it would be possible to provide estimates of statistical variation for the total population. Unless two samples are compared, it is impossible to determine variance (i.e., how different the various cases are from each other) in the population. Each sample was drawn by randomly selecting a cluster from the first stratum (or zone) and by selecting every succeeding 200th cluster from the remaining strata (zones). Thus, each sample consisted of 28 clusters since one cluster was drawn from each of the 28 strata (zones).

Since the sampling process was based on estimated numbers of full-time staff, and since a master list of all full-time staff did not exist, it was necessary to use some large directory of names as a means to define the alphabetical parameters which would identify the names of the persons within each of the clusters selected through the stratified sampling process described above. Through a number-assigning plan, it was possible to know which institution was associated with each cluster drawn in the sample. For each institution having one or more clusters in a sample, the large directory of names was divided into a number of parts equal to the number of clusters associated with that institution. Thus, if an institution had 347 clusters, the directory was divided into 347 parts. The names of the individuals at the beginning and the end of the parts of the directory that corresponded to the sample clusters became the alphabetical parameters for identifying the individual faculty and staff members from that institution. Each of the 47 institutions was asked to provide the names of faculty and staff that fell within the designated alphabetical parameters for that institution. For a listing of the name boundaries for each of the 47 institutions in the sample, see Appendix B.

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[1] William L. Hays, Statistics for the Social Sciences, 2d ed. (New York: Holt, Rinehart and Winston, Inc., 1973), p. 290.

This complex sampling procedure was followed for two major reasons. First, it was necessary for making estimates about the complete population of instructional activities. Second, it provided a means of identifying a sample of faculty members even though a directory of all faculty members in post-secondary educational institutions did not exist.

The sampling procedure resulted in the identification of 1,076 faculty and staff from the 45 cooperating institutions. Two institutions did not grant permission to the research team to conduct the study. Subsequently, a sample of faculty was needed as respondents for the Focus Delphi study reported in Chapter III. The Focus Delphi faculty sample was drawn from the institutional survey sample because the names had been obtained through a stratified sampling process, the names were available, and the reduction in number would not adversely affect the institutional survey. The Focus Delphi sample removed every fifth name--209 names in all--from the 1,076 names in the original sample. As a result, the size of the institutional survey sample was reduced from 1,076 to 867.

It was decided that instructional activities should be sampled over a one-year period of time because instruction offered through post-secondary continuing education is available throughout the entire year. Since the focus of the study was on continuing education, programs and courses offered during the summer and between terms were as important as those available during the academic year. The time-sampling procedure was accomplished in the following manner:

1. Each of the 867 persons in the sample was first asked to estimate the amount of time spent in instructional activity during the preceding twelve-month period.
2. Using the above data, one to five reporting weeks were assigned to each respondent. The rationale for basing the number of reporting weeks on the extent of involvement in continuing education instruction was to improve the sensitivity of the response. Those individuals who provide extensive instruction for continuing education students, it was assumed, would be involved with a variety of students, modes of instruction, subject-matter areas, etc. Thus, it seemed desirable to sample as many as five weeks in the year for these people. Conversely, it was assumed that those less involved in post-secondary continuing education instruction would have less variation to report. The number of reporting weeks assigned to each subject, therefore, was based on the hours of continuing education instruction provided during the preceding twelve-month period. The correspondence

between the hours of instruction and weeks assigned to report is shown in Table 1.

TABLE 1

NUMBER OF REPORTING WEEKS ASSIGNED TO SUBJECTS

Number of Reporting Weeks Assigned	Number of Subjects	Number of Hours of Continuing Education Instruction Reported During Preceding 12-Month Period
5	6	More than 1,000
4	10	600-999
3	15	200-599
2	26	100-199
1	810	Less than 100

3. For those who failed to provide an estimate of time in continuing education instruction, one reporting week was arbitrarily assigned. While some sensitivity would be sacrificed by this decision, it was felt that data for one week would be preferred to no data at all.
4. The actual reporting weeks for each individual were assigned using a table of random numbers. This technique is one of the most common schemes for sampling events randomly and independently.[1]

Selection of a Data-Collection Method

Since information was desired from 867 individuals in 45 post-secondary education institutions throughout the State, and, given the resources for carrying out the study, the survey technique was selected as the most effective and efficient method for collecting the necessary data. A survey would be efficient since the questionnaire could be administered expediently in any location in the State with a minimum of expense. A survey questionnaire would be effective since the same units of descriptive data about continuing activities could be collected from each source. The survey technique was employed on the assumption that a large sample size was desirable, that any post-secondary instructor in the State should have the potential for being included in the sample, and that the instructors would be willing to provide the desired data. The survey technique was selected instead of the interview method primarily because of the greater costs involved in conducting personal interviews as contrasted with the mailing of questionnaires.

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[1] William L. Hays, Statistics for the Social Sciences, 2d ed. (New York: Holt, Rinehart and Winston, Inc., 1973), p. 73.

Instrumentation

Three instruments for collecting data were developed. A copy of each instrument is attached in Appendix C.

BSCP Form 1 was designed to collect (a) estimates of time spent in twenty-one categories of instructional activity during 1970-71 and projected for 1971-72; and (b) demographic data about the respondents. The primary purpose for this instrument was to obtain time-estimate data for use as a basis for determining the number of reporting weeks for each respondent.

The 21 categories of instructional activity were developed by the research team to include all possible types of instructional activity. Categories 1-6 included instruction creditable toward academic degrees, and Categories 7-16 included non-credit instruction. Categories 17-21 included instructional activities at levels other than post-secondary and counseling. The categories selected were:

1. Regular Division, Lower Division, Undergraduate
2. Regular Division, Upper Division, Undergraduate
3. Regular Division, Graduate
4. Continuing Education Division, Lower Division, Undergraduate
5. Continuing Education Division, Upper Division, Undergraduate
6. Continuing Education Division, Graduate
7. Instruction in professional and technical knowledge and skills for individuals with previous college work or equivalent experience
8. Technical and vocational instruction for post-high school students with little or no previous college work or equivalent experience
9. Remedial instruction for post-high school students preparing for academic work at the college level
10. Sectarian, moral, or religious
11. Sports, recreation, hobbies, handicrafts
12. Art, drama, music, and other cultural development activities
13. Home and family life
14. Current events, public affairs, and citizenship
15. Agriculture
16. Other instruction not creditable toward academic degrees
17. Early childhood education
18. Elementary level
19. Secondary level academic or technical-vocational
20. Counseling
21. Other

The questionnaire was sent to each person in the sample during January and February, 1972.

BSCP Form 2 was developed to collect descriptive data about the respondent's instructional activities. Information was sought about (a) the number of activities, (b) the number of participants, (c) the type of prerequisite competencies required for participation, (d) the objectives of the activity, (e) the medium and mode of instruction used, (f) the subject matter included, (g) the length and place of the activity, and (h) the number and type of sources of financial support for the activity.

The questionnaire was developed so that 10 instructional activities could be described on the response sheet. The respondent selected and coded his or her response for each variable according to a list which was enclosed with the questionnaire.

The alternative responses for all but one of the variables were developed by the research team. The subcategories were intended to be mutually exclusive while providing a comprehensive description of the variable. A system that was developed by the U.S. Office of Education for classifying the various subject-matter areas was selected because of its previous use in collecting data from colleges and universities. The major variables and their subcategories were:

1. Objectives of the Instructional Activity--This variable was used to describe the type of instructional objective addressed by the instructor. Three objectives involved credit, and four involved non-credit activities.
    a. Objectives leading to an academic degree or diploma
    b. Objectives leading to a general or vocational diploma
    c. Objectives leading to certification or licensing
    d. Objectives designed to enhance general knowledge without regard to diploma, certification, or degree requirements

   e. Objectives designed to enhance specific knowledge relating to individual or institutional problems or interests without regard to credit
   f. Objectives leading to remedial or basic preparation without regard to credit
   g. Objectives leading to special or custodial education
   h. Other

2. The Medium of Instruction Used--This variable was included to determine the type of contact with learners that was used by instructors. There were nine response categories.

   a. Writing an evaluation of performance
   b. Designing or writing instructional materials
   c. Broadcasting: live TV--open reception
   d. Broadcasting: live TV--closed circuit
   e. Broadcasting: recording TV tape for delayed use
   f. Broadcasting: live audio--open reception
   g. Broadcasting: live audio--closed circuit
   h. Broadcasting: recording audio material for delayed use
   i. Filming
   j. Addressing individuals face-to-face, alone, or in groups

3. Instructional Mode--This variable was used to describe the ways that the instructor used in teaching his or her students. Seven response categories were provided.

   a. Lecture, exposition, or demonstration
   b. Seminar, dialogue, or discussion
   c. Workshop, lab, or supervision of experiential learning
   d. Lecture/seminar combination
   e. Lecture/workshop combination

f. Seminar/workshop combination

g. Lecture/seminar/workshop combination

4. Subject Matter--This was included to discover the nature of the content that was taught. Twenty-six different subject-matter responses were provided. The complete list is shown in Code List F with the instrumentation in Appendix C.

5. Place of Activity--Twelve different locations were provided so the respondent could identify the site where the instructional activity took place.

a. Church or synagogue

b. School or college facility

c. Government facility

d. Cultural facility

e. Voluntary association facility

f. Commerical facility

g. Broadcasting facility

h. Labor union facility

i. Place of business

j. Private home

k. En route

l. Other

6. Prerequisite Competencies for Participation--The respondent was asked to indicate the years of schooling and experiential prerequisites needed by the learners to participate in the instructional activity. Ten formal educational and eleven experiential prerequisites were provided.

a. Formal education required by learners to receive instruction:

(1) no years of schooling required

(2) completion of 1 to 7 grades of school

(3) completion of 8 grades of school

(4) completion of 9 to 11 grades of school

(5) completion of 12 grades of school

(6) completion of 1 year of college

(7) completion of 2 years of college

(8) completion of 3 years of college

(9) completion of 4-year college degree

(10) completion of an advanced degree or first professional degree.

b. Experiential prerequisites needed by learners to receive instruction:

(1) none

(2) functional literacy

(3) vocational experience comparable to high school experience

(4) understanding of arts, sciences, or humanities comparable to high school experience

(5) vocational, technical, or professional experience comparable to two years of college

(6) understanding of arts, sciences, or humanities comparable to two years of college

(7) technical or professional experience comparable to baccalaureate degree

(8) understanding of arts, sciences, or humanities comparable to baccalaureate degree

(9) advanced technical or professional experience comparable to Master's or first professional degree

(10) advanced understanding of arts, sciences, or humanities comparable to a Master's or first professional degree.

This questionnaire was self-administered according to the schedule of assigned reporting weeks for each respondent during the twelve-month period from March, 1972 to March, 1973.

BSCP Form 3 was designed to elicit information about the participants in the instructional activities reported on BSCP Form 2. The respondents were asked to provide data about (a) the number of learners according to sex, race, age, and number of years of school completed, and (b) about the people who were involved in planning the instructional activity.

The primary instruments--BSCP Forms 2 and 3--and the appropriate instructions were reviewed by members of the project team, by members of the project advisory committee, and by representatives of the project sponsor. Six faculty members at Syracuse University were involved in a pretest of the materials. The reviewers made suggestions about items such as length of the questionnaire, clarification of the purpose of the questionnaire, use of examples or illustrations, and the clarity and brevity of the instructions. All suggestions were considered and appropriate revisions were made. Both Forms 2 and 3 were reworked to fit one sheet of paper. The purposes of the study and of the data-gathering instruments were re-stated. The meanings of key terms and the instructions were checked for clarity. Although brevity of the communication was a major goal, additions were included whenever communication was enhanced. Coding systems that might be familiar to the reader, (such as the U.S. Office of Education subject-matter coding scheme), were used whenever possible. An example of how to record instructional activities was added.

Data Collection

The instructional activity data were collected during the fifty-two week period beginning March 3, 1972 and ending March 4, 1973. The first week of March, 1972 was the earliest week that questionnaires could be distributed because some institutions did not provide the names of their faculty members who were selected in the sample and because revisions were still being incorporated into the questionnaires until that week.

The respondents were contacted by a personal letter which explained the purposes of the study and requested their participation. Each respondent was asked to report each instructional activity he engaged in during the specified week on BSCP Form 2 and to provide data about the participants in each activity on BSCP Form 3. The reporting period began on a Monday and ended the following Sunday. The reporting period was selected so that the questionnaires would be on the respondent's desk on Monday morning of his or her reporting week. On the following Monday, it was hoped that the respondent would add any instructional activities he or she had provided during the weekend and then return the questionnaires.

Two efforts were made to encourage the sample of faculty and staff to respond to the questionnaires prior to the collection of the data. First, the chief administrative officer of the colleges and universities from which the faculty and staff sample was drawn was asked to endorse the study and to encourage participation in it. Forty-five of the forty-seven administrators did agree to support the study and to cooperate with the research team. Second, the institution was asked to designate an individual who would serve as a liaison person between the institution and the research team. This individual assisted the research team by providing names of the faculty and staff sample based on the alphabetical parameter guidelines provided. He also responded to questions from persons within his institution, and he assisted the research team with the follow-up activities with non-respondents.

Three general approaches were used throughout the study to encourage a high rate of response by participants. Copies of the various communications are attached in Appendix D. Initially, a second letter was sent to the non-respondent if his questionnaire had not been received within seven days from the end of the reporting week. If the individual had not responded after one additional week, an attempt was made to locate the individual by telephone. The difficulties and expense of locating faculty members were so great that an alternative follow-up procedure was developed. The second approach involved the assistance of the contact person at each institution. Again, individuals were given seven days for sending in the data-collection forms. Two weeks after the close of a reporting period, the appropriate contact person was requested to communicate with each non-respondent at his institution. Copies of a suggested memorandum were made available for the contact person to use if he desired. If a third week had elapsed without hearing from the individual, the research team attempted to reach him by telephone. This procedure also proved to be difficult and costly, and it became necessary to eliminate the telephone contacts because of the expense involved. The third effort to increase participation involved sending a brief memorandum which asked the respondent to report whether or not he or she was involved in instructional activity during the specified week. This procedure resulted in improving the response rate, although many of these respondents had provided no instruction during the assigned reporting period.

At this point, we can merely speculate about the reasons for the remaining non-respondents. Perhaps the goal of a high response rate was unrealistic. University personnel are seldom asked to provide this type of information, even within their own institution. Many faculty are used to being paid for providing information and advice. More information is needed about ways and means to increase the response rate of college and university instructors.

Response Rate

A total of 977 questionnaires was mailed to the 867 persons in the sample during the 52-week period, according to the predetermined schedule of assigned weeks. Of this total, 113 questionnaires (11.5 percent) were returned because the addressee could not be reached. Four reasons were given as to why the questionnaire could not be delivered: (1) the person had left the college or university, (2) the person was on sabbatic leave at another location, (3) the person was deceased, or (4) the person had moved and left no forwarding address. Persons leaving the university accounted for most of the returned questionnaires.

For three reasons, no attempt was made to locate replacements for the 113 individuals who could not be reached. First, some percentage of faculty turnover occurs naturally each year. Second, any replacement with a faculty member who was outside the alphabetical parameters of the cluster would have violated the sampling procedures followed. Third, based upon the experience of the project staff in obtaining the names of the faculty who were included initially in the sample cluster, any ready replacement with a new faculty member within the alphabetical parameters of the cluster would have been difficult, it not impossible, for some institutions. Apparently some institutions did not maintain a central listing of current faculty for the 1972-73 academic year so that obtaining the names of the initial sample proved to be a surprisingly difficult task.

The number of responses by each reporting week is shown in Table 66, Appendix E. A summary of that information is presented in Table 2.

TABLE 2

SUMMARY OF RESPONSE TO INSTRUCTIONAL ACTIVITY SURVEY

	Number		Percent of Total Mailing	Percent of Number Reached
Total Gross Mailing	977			
Not Reached	113		11.56	
Reached	864		88.44	
Declined to participate		80	8.20	9.25
Questionnaires not returned		323	33.06	37.38
Questionnaires returned		461	47.18	53.35

As shown in Table 2, 53 percent (N=461) of the questionnaires that could be delivered were returned by the respondents. Respondents declined to complete approximately 9 percent of the questionnaires, and 37 percent of the questionnaires were not returned.

Techniques Utilized for Examining the Data

Since the task of developing effective devices for collecting information about post-secondary continuing education emerged as an important purpose of the study, the ways in which the data could be analyzed became an equally important issue. All analyzed data at some point would have to meet some criterion of utility; i.e., "Were the data useful in policy planning for post-secondary continuing education?"

Three approaches were used to extract meaning from the data. One technique used statistics from the study to extrapolate to the total population;

i.e., all post-secondary continuing education in the State. A second technique--the computation of descriptive statistics--is widely used in analyzing data and needs little explanation. The third approach provided descriptive data about different definitions of post-secondary continuing education.

Each technique will be described and illustrative examples of its use will be provided. Also, the advantages and limitations of each technique, as seen by the project staff, will be presented.

Extrapolation to the Total Population

When valid, summary statistics from a sample of subjects provide estimations--within known percentage points of accuracy, and to a known level of confidence--of totals for an entire population. The translation of summary statistics based on a sample into estimates for the national adult population is evident in the familiar national opinion polls and from the national inventory of educational activities of adults.[1]

The stratified sampling procedure used in this study was designed so that the statistics obtained could be translated into estimates for all post-secondary educational institutions in the State. Since only a small percentage of the population is queried, a major advantage of sampling is that the available resources can be used for more detailed questioning of respondents than would be possible in a total population survey. Also, the sampler is much more aware of the idiosyncrasies of the sampled population when directly involved in choosing and querying the sample than is the case when the surveyor must query through an institutional middleman. The major limitation in this extrapolation approach is the difficulty of obtaining reliable data. The sampling procedures employed in this study allow the surveyor to have a high degree of confidence in the reliability of the data, but these procedures do not guarantee that the data will be reliable.

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[1] John W. C. Johnstone and Ramon J. Rivera, Volunteers for Learning (Chicago: Aldine Publishing Co., 1965), p. 33.

A high response rate (e.g., 80 percent) from participants in the study is also essential for determining the level of confidence that can be placed in the data. While 53 percent of the questionnaires that could be delivered were returned, this rate of response prevents the declaration of accurate estimates for post-secondary continuing education in the State.

Even so, selected findings from the data will be presented to illustrate how the data can be used. The survey team also contends that the major error in the data is that they provide a too-conservative view of the situation. Because of the ease of responding to the questionnaire for persons having no instructional activity to report, the follow-up efforts directed to non-respondents elicited primarily "no activity" reports. Presumably those who did have instructional activities, and therefore had to fill out a questionnaire in detail, were less likely to take the time to respond.

The procedures used for translating the statistics into estimates for the State are presented in Appendix F. All estimates are for the one-year period from March, 1972 to March, 1973. The estimates are also based on statistics which have been converted from the raw data to take into account the differential weights assigned to individuals with different numbers of reporting periods.

Selected Examples

Statistics pertaining to (a) the number of instructional activities, (b) the number of instructor hours, (c) the number of student hours, and

(d) demographic characteristics of the students were translated into estimates for post-secondary education in the State. This section will present selected findings for illustrative purposes followed by tables of supporting data. Tables 3 - 8 present estimates concerning all instructional activities. Estimates relating to instructor hours and student hours are provided in Tables 9 - 12 and Tables 13 - 15 respectively. The estimates for demographic items are found in Table 16. The interested reader is encouraged to examine each table for other findings which may be of interest and are not mentioned in the narrative.

As for the number of post-secondary instructional activities provided in the State during the period March, 1972 to March 1973, the data presented can be used to examine the activities by various (a) purposes, (b) subject-matter areas, (c) prerequisites, (d) methods of communication used by the instructor, (e) instructional modes used by the instructor, and (f) locations where the activity took place. Based on the statistics that were obtained, it was estimated that more than 17.5 million different instructional activities were provided by post-secondary educational institutions in the State during the one-year period studied (Table 3). The reader is reminded that an "instructional activity" involved a period of time in which an instructor was in continuous contact with one or more learners. Thus, the number refers to presentations, classes, meetings, and personal conferences rather than to courses, residential conferences, and programs.

Other projected estimates concerning the number of instructional activities included:

1. More than 16.5 million instructional activities took place in small groups (Table 6)
2. Approximately 15 million instructional activities took place in a college or university facility (Table 8)

,. More than 12 million instructional activities required 12 years of schooling or more as a requisite for participation (Table 5)

4. More than 9.1 million instructional activities involved academic or diploma credit (Table 3).

TABLE 3

ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES IN DIFFERENT OBJECTIVE CATEGORIES

Code	Type of Objective	Percent of All Activities	Estimated Number (in thousands)
1	Academic diploma or degree (High School Equivalency, B.A., M.S., M.D., etc.)	51.97	9,110
2	General or vocational diploma	3.87	679
3	Certification or licensing as a specialist	6.48	1,137
4	General knowledge without regard to diploma, certification, or degree requirements	15.03	2,635
5	Individual or institutional problems without regard to diploma, certification, or degree requirements	12.34	2,163
6	Remedial or basic preparation without regard to diploma, certification, or degree requirements	6.88	1,206
7	Special or custodial education	3.40	596
8	Other	0.00	0
	Total	99.97	17,527

TABLE 4

ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES BY SUBJECT-MATTER SUBCATEGORIES

Code	Subject Matter	Percent of All Activities	Estimated Number (in thousands)
1	Agriculture and Natural Resources	0.63	111
2	Architecture and Environmental Design	0.94	166
3	Area Studies	0.00	0
4	Biological Sciences	1.50	263
5	Business and Management	4.19	735
6	Communications	4.27	749
7	Computer and Information Science	0.00	0
8	Education	3.40	596
9	Engineering	4.20	736
10	Fine and Applied Arts	8.54	1498
11	Foreign Language	0.68	119
12	Health Professions	5.06	887
13	Home Economics	0.00	0
14	Law	0.63	111
15	Letters	30.38	5325
16	Library Science	0.28	42
17	Mathematics	2.45	430
18	Military Science	0.00	0
19	Physical Science	2.68	471
20	Psychology	1.74	305
21	Public Affairs and Services	0.07	14
22	Social Sciences	1.02	180
23	Theology	2.13	374
49	Interdisciplinary	1.97	347
50	Recreation	14.55	2551
51	Other	8.06	1414
	Total	99.97	17527

TABLE 5

ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES BY YEARS OF SCHOOLING REQUIRED FOR PARTICIPATION

Years of Schooling Required for Participation	Percent of All Activities	Estimated Number (in thousands)
Less than a high school diploma	32.22	5,782
Completion of 12 grades of school	36.01	6,462
Completion of some college (1-3 years)	17.69	3,175
Completion of a baccalaureate or advanced college degree	14.06	2,523
Total	99.98	17,942

TABLE 6

PERCENT AND ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES BY CATEGORY OF MEDIUM OF COMMUNICATION USED BY INSTRUCTOR

Code	Medium of Communication	Percent of All Activities	Estimated Number (in thousands)
0	Writing an evaluation of performance (e.g., instructional correspondence)	1.9	335
1	Writing or designing instructional material	4.2	748
2	Broadcasting: Live TV-open reception	0.6[a]	14
3	Broadcasting: Live TV-closed circuit		0
4	Broadcasting: Recording TV tape for delayed use		70
5	Broadcasting: Live audio-open reception		0
6	Broadcasting: Live audio-closed circuit		28
7	Broadcasting: Recording audio material for delayed use		0
8	Filming	0.2	42
9	Addressing individuals face-to-face (alone or in groups)	93.1	16,573
	Total	100.0	17,810

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[a] Data pertaining to the six broadcasting categories were consolidated into one category for computing the percentage statistic.

TABLE 7

PERCENT AND ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES BY CATEGORY OF INSTRUCTIONAL MODE USED BY INSTRUCTOR

Code	Instructional Mode	Percent of All Activities	Estimated Number (in thousands)
0	No Response	1.1	
1	Lecture, exposition or demonstration	26.8	4,770
2	Seminar, dialogue or discussion	26.4	4,687
3	Workshop, lab, or supervision of experiential learning	5.6	998
4	Combination of Lecture and Seminar	29.4	5,228
5	Combination of Lecture and Workshop	7.3	1,303
6	Combination of Seminar and Workshop	0.5	97
7	Combination of Lecture, Seminar, and Workshop	2.8	499
	Total	99.9	17,582

TABLE 8

PERCENT AND ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES BY PLACE OF ACTIVITY CATEGORIES

Code	Place of Activity	Percent of All Activities	Estimated Number (in thousands)
0	Church or Synagogue	1.2	208
1	School, college, residential school, extension center	84.8	15,073
2	Federal, state, county, or municipal government facility	4.6	818
3	Cultural facility (non-government, non-profit)	0.9	166
4	Voluntary association facility	0.2	28
5	Commercial facility	0.0	0
6	Broadcasting facility	0.0	0
7	Labor union facility	0.0	0
8	Place of business	0.4	69
9	Private home	2.7	485
10	En route	0.0	0
11	Other	5.2	929
	Total	100.0	17,776

TABLE 9

ESTIMATED NUMBER OF INSTRUCTOR HOURS EXPENDED IN DIFFERENT CATEGORIES OF OBJECTIVES

Code	Type of Objective	Percent of All Time	Estimated Hours (in thousands)
1	Academic diploma or degree (High School Equivalency, B.A., M.S., M.D., etc.)	54.76	15,614
2	General or vocational diploma	2.73	781
3	Certification or licensing as a specialist	5.43	1,550
4	General knowledge without regard to diploma, certification, or degree requirements	13.16	3,754
5	Individual or institutional problems without regard to diploma, certification, or degree requirements	12.20	3,481
6	Remedial or basic preparation without regard to diploma, certification, or degree requirements	7.84	2,237
7	Special or custodial education	3.83	1,094
8	Other	0	0
	Total	99.95	28,511

Similarly, estimates of the amount of time spent by instructors in carrying out the instructional activities were computed. Table 9 shows that approximately 28.5 million instructor hours were involved in the estimated 17.5 million instructional activities during the period from March, 1972 to March 1973. More than 15.6 million hours were involved with academic degree credit activities and approximately 10.5 million hours were devoted to four

TABLE 10

ESTIMATED NUMBER OF INSTRUCTOR HOURS EXPENDED IN DIFFERENT SUBJECT-MATTER AREAS

Code	Subject Matter	Percent of All Time	Estimated Hours (in thousands)
1	Agriculture and Natural Resources	0.82	222
2	Architecture and Environmental Design	1.07	291
3	Area Studies	0.00	0
4	Biological Sciences	1.20	326
5	Business and Management	5.43	1,472
6	Communications	3.49	945
7	Computer and Information Science	0.00	0
8	Education	7.40	2,005
9	Engineering	6.26	1,698
10	Fine and Applied Arts	9.62	2,607
11	Foreign Language	1.68	455
12	Health Professions	6.22	1,687
13	Home Economics	0.00	0
14	Law	0.54	146
15	Letters	21.96	5,953
16	Library Science	0.08	21
17	Mathematics	1.81	490
18	Military Science	0.00	0
19	Physical Science	2.64	716
20	Psychology	2.10	570
21	Public Affairs and Services	0.20	55
22	Social Sciences	0.90	245
23	Theology	3.26	884
49	Interdisciplinary	1.41	381
50	Recreation	10.84	2,939
51	Other	11.07	3,002
	Total	100.00	27,110

TABLE 11

ESTIMATED NUMBER OF INSTRUCTOR HOURS EXPENDED BY YEARS OF SCHOOLING PREREQUISITE CATEGORIES FOR STUDENTS

Code	Years of Schooling Required for Participation	Percent of All Time	Estimated Hours (in thousands)
0	None	7.31	2,101
1-2	Completion of 8 grades of school	12.58	3,617
3	Completion of 9-11 grades of school	9.12	2,622
4	Completion of 12 grades of school	29.56	8,498
5-6-7	Completion of some college (1-3 years)	23.43	6,735
8	Completion of 4 years of college	8.03	2,309
9	Completion of an advanced college degree	9.94	2,859
	Total	99.97	28,741

categories of non-credit instruction (Codes 4, 5, 6, and 7). Other estimates pertaining to instructor hours included:

1. More than 25.8 million hours were involved with face-to-face groups (Table 12)
2. Writing or designing instructional material occupied 1.6 million hours (Table 12)
3. More than 1 million instructor hours were devoted to each of eight subject-matter areas--Letters, Other, Recreation, Fine and Applied Arts, Education, Engineering, Health Professions, and Business and Management (Table 10)
4. More than 20 million instructional hours were spent in teaching students who had completed 12 years or more of school (Codes 4-9, Table 11).

TABLE 12

ESTIMATED NUMBER OF INSTRUCTOR HOURS EXPENDED IN DIFFERENT MEDIA OF COMMUNICATION

Code	Medium of Communication	Percent of All Time	Estimated Hours (in thousands)
0	Writing an evaluation of performance (e.g., instructional correspondence)	2.50	714
1	Writing or designing instructional material	5.83	1,663
2-7	Broadcasting[1]	0.80	229
8	Filming	0.29	83
9	Addressing individuals face-to-face (alone or in groups)	90.56	25,822
	Total	99.98	28,511

[1] Data pertaining to the six broadcasting categories (i.e., live TV--open reception, live TV--closed circuit, recording TV tape for delayed use, live audio--open reception, live audio--closed circuit, recording audio material for delayed use) were consolidated into one category for computing the percentage and the estimated hours.

It was also possible to obtain an estimate of the number of student hours involved in the activities that were reported. These data were obtained by multiplying the length of each instructional activity by the number of activity participants and translating these statistics into estimates for the State. The data presented in Tables 13 - 15 can be used to examine the total number of student hours by various (a) objectives, (b) media of communication, and (c) instructional modes.

The estimates for the State indicated that:

1. Approximately 182 million hours were invested by students in learning activities during the period studied (Table 13)

2. More than 124 million student hours were spent in instructional activities leading to academic degrees(Table 13)
3. More than 40.1 million student hours were involved in non-credit instructional activities (Codes 4-7, Table 13)
4. Approximately 174 million student hours were involved in a face-to-face group setting (Table 14)

TABLE 13

ESTIMATED NUMBER OF STUDENT HOURS EXPENDED IN DIFFERENT OBJECTIVE CATEGORIES

Code	Type of Objective	Percent of All Time	Estimated Hours (in thousands)
1	Academic diploma or degree (High School Equivalency, B.A., M.S., M.D., etc.)	68.05	124,137
2	General or vocational diploma	3.13	5,724
3	Certification or licensing as a specialist	6.70	12,232
4	General knowledge without regard to diploma, certification, or degree requirements	11.35	20,717
5	Individual or institutional problems without regard to diploma, certification, or degree requirements	5.86	10,699
6	Remedial or basic preparation without regard to diploma, certification, or degree requirements	2.06	3,771
7	Special or custodial education	2.80	5,118
8	Other	0.00	0
	Total	99.95	182,398

TABLE 14

ESTIMATED NUMBER OF STUDENT HOURS EXPENDED
IN DIFFERENT MEDIA OF COMMUNICATION

Code	Medium of Communication	Percent of All Time	Estimated Hours (in thousands)
0	Writing an evaluation of performance (e.g., instructional correspondence)	0.58	1,054
1	Writing or designing instructional material	2.69	4,911
2-7	Broadcasting[1]	1.27	2,309
8	Filming	0.03	55
9	Addressing individuals face-to-face (alone or in groups)	95.43	174,068
	Total	100.00	182,397

[1] Data pertaining to the six broadcasting categories (i.e., live TV--open reception, live TV--closed circuit, recording TV tape for delayed use, live audio--open reception, live audio--closed circuit, recording audio material for delayed use) were consolidated into one category for computing purposes.

5. More than 40 million student hours were spent in each of three modes of instruction: (a) lecture/seminar combination, (b) seminar, and (c) lecture (Table 15).

The responding instructors also provided descriptive information about the persons who had participated in their instructional activities. In cases where it was not possible to provide accurate statistics, the instructors were asked to estimate the numbers of different individuals by categories of age, race, sex, and prior years of schooling completed. Thus, the reader should know that the following statistics are based on, in some cases, the best estimates of the instructors rather than on actual numbers. While some degree of

TABLE 15

ESTIMATED NUMBER OF STUDENT HOURS EXPENDED IN DIFFERENT MODES OF INSTRUCTION

Code	Mode of Instruction	Percent of All Time	Estimated Hours (in thousands)
1	Lecture, exposition, or demonstration	24.55	44,777
2	Seminar, dialogue, or discussion	25.21	45,975
3	Workshop, lab, or supervision of experiential learning	8.37	15,274
4	Combination of Lecture and Seminar	26.51	48,350
5	Combination of Lecture and Workshop	10.14	18,497
6	Combination of Seminar and Workshop	0.85	1,558
7	Combination of Lecture, Seminar, and Workshop	4.37	7,966
	Total	100.00	182,397

error was involved, it was felt that the estimates could be used since some people tend to overestimate while others tend to underestimate. Thus, errors in judgment would be randomly distributed with the result that they tend to cancel the effects of each other.

The estimates for the total population are given in Table 16. It should be noted that each instructional activity represents a single, continuous contact between an instructor and one or more learners. Thus, a traditional college course would consist of several instructional activities distributed over a period of time.

Considering all instructional activities provided by colleges and universities in New York State during the period from March, 1972 to March, 1973, it was estimated that:

TABLE 16

ESTIMATED NUMBER OF PARTICIPANTS IN ALL INSTRUCTIONAL ACTIVITIES[1] BY DEMOGRAPHIC CATEGORIES

(in thousands)

Sex	Male	Female						
A	125,396	97,011						
Racial Group	American Indian	American Oriental	Black American	Spanish Surnamed	Caucasian	Other		
B	430	2,690	14,948	7,169	181,806	4,479		
Age[2]	Under 17	17 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 and over	
C	21,299	155,210	25,390	10,386	4,423	1,830	111	
Prior Years of School Completed	None	K - 7	8	9 - 11	12	13 - 14	15 - 16	over 16
D	2,912	4,229	763	14,075	70,193	80,565	16,404	28,094

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[1] The estimated number of participants was based on reported data. The totals for the different variables may not coincide because missing data were not replaced by estimates but were computed as zeroes.

[2] Information explaining why persons under 17 years of age were participating in post-secondary instructional activities was not obtained.

1. Approximately 222.4 million persons took part in a total of 17.5 million instructional activities
2. The participants involved approximately 125 million men and 97 million women
3. More than 181 million of the participants were Caucasian as contrasted to 30 million non-Caucasian participants

4. Only 6.2 million of the participants were 45 years of age or older
5. The over-65 age group was represented by only 111,000 persons
6. The number of participants with no previous schooling was estimated to be almost 3 million; 28 million participants had completed more than 16 years of school
7. More than 195 million of the students had completed 12 or more years of school.

Descriptive Statistics

For samples of numerical data, familiar descriptive statistics are used because they happen to be simple and useful. Their utility lies in their capacity for summarizing large amounts of data into a particular numerical value. Descriptive statistics, therefore, are selected on the basis of what they tell and what the writer wishes to communicate about a given sample of numerical data.

The two statistics selected for summarizing the data were (a) proportions, and (b) cross-tabulation summations and proportions. Proportions were useful in defining the relative location of a particular numerical value within the total set of data. Their use is limited only by the accuracy of the sample.

Selected Examples of Findings Using Percentages

In the previous section, Tables 3-15 presented data which indicated the proportion of each subcategory of the total category. In examining these data, it is possible to note that:

1. Instructional activities involving academic credit comprised a majority (almost 52 percent) of all post-secondary instructional activities (Table 3)

2. More than one-third of all instructional activities, however, addressed non-credit objectives (Codes 4, 5, and 6, Table 3)
3. As for subject-matter, the largest percentage (30 percent) of the activities was offered in Letters (including speech, philosophy, linguistics) (Table 4)
4. The other subject-matter areas most likely to be included were, in descending order: Recreation (14 percent); Fine and Applied Arts (8.5 percent); Other subjects that respondents did not classify in the categories[1] (8 percent); Health Professions (5 percent); Communications (4 percent); Engineering (4 percent); Business and Management (4 percent); and Education (3 percent) (Table 4)
5. Approximately one-third (32 percent) of the activities were available to persons who had completed less than twelve grades of school (Table 5)
6. The face-to-face group was clearly the dominant medium of instruction, since it was used in 93 percent of all instructional activities (Table 6)
7. Three instructional modes were used almost equally--lecture/discussion (29 percent), lecture (26 percent), and discussion (26 percent) (Table 7)
8. Approximately 15 percent of all instructional activity was held outside college and university facilities. Government and other facilities (each 5 percent), private homes (3 percent), and churches (1 percent) were the non-college facilities most used (Table 8)
9. While the Letters subject-matter area accounted for approximately 30 percent of all instructional activity, less than 22 percent of all instructor time was involved (Table 10)

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[1] The reasons for this large number of subject-matter classifications as "Other" are unknown. The classification scheme may have lacked sufficient categories for some while being too complex for other respondents.

10. For certain subject-matter areas (Education, Other, Engineering, Fine and Applied Arts, Health Professions, Business and Management), the proportion of instructor time involved was higher than the proportion of instructional activities conducted (compare Tables 10 and 4)
11. Academic credit activities involved a higher proportion (68 percent) of student hours than did non-credit activities (Codes 4, 5, and 6, approximately 19 percent); thus, classes given for credit were larger than non-credit activities (compare Tables 13 and 3)
12. The broadcasting medium of instruction, while accounting for 0.6 percent of all activities and 0.8 percent of all instructor time, involved 1.2 percent of all student hours (compare Tables 6, 12, and 14)
13. The workshop mode of instruction also accounted for a larger percentage of student hours than its percentage of all instructional activity (compare Tables 7 and 15)
14. Approximately 20 percent of all participants were 25 years of age and older (Table 17)
15. Less than 1 percent of the participants were 55 years of age and older (Table 17)
16. Almost 9 out of 10 participants were of the white race; all minority races combined represented only 1 out of 10 participants (Table 17).

Cross-Tabulation Analysis

Perhaps the most important feature of surveys of this nature is that it is possible to tabulate two-way frequency tables for any two variables included in the questionnaire. In fact, the number of dimensions of a frequency table is limited only by the number of variables, but the two-way table is by far the most common.

TABLE 17

DEMOGRAPHIC CHARACTERISTICS OF ALL PARTICIPANTS IN ALL POST-SECONDARY INSTRUCTIONAL ACTIVITIES (in percentages)

Sex	Male	Female						
A	56.4	43.6						
Racial Group	American Indian	American Oriental	Black American	Spanish Surnamed	Caucasian	Other		
B.	0.2	1.3	7.1	3.4	86.0	2.1		
Age [1]	Under 17	17 – 24	25 – 34	35 – 44	45 – 54	55 - 64	65 and over	
C.	9.7	71.0	11.6	4.8	2.0	0.8	0.1	
Prior Years of School Completed	None	K – 7	8	9 – 11	12	13 – 14	15 – 16	over 16
D.	1.3	1.9	0.4	6.5	32.3	37.1	7.6	12.9

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[1] Information explaining why persons under 17 years of age were participating in post-secondary instructional activities was not obtained.

The preceding sections have focused on the percentages of, and population estimates applicable to, the subcategories of single variables (i.e., objective, place of activity, subject-matter, etc.). In Tables 18-29, the data are arrayed in matrices so that the data can be analyzed in terms of two variables.

The findings are presented as proportions and population estimates so that it will be possible to obtain specific answers. The following examples are circled in the table indicated to illustrate how the data can be used:

(a) more than 5 percent of all instructional activity was non-credit instruction in the area of Fine and Applied Arts (Table 18); (b) more than 46 percent of all instructional activity occurred in a face-to-face group setting and addressed academic degree objectives (Table 21); (c) there were approximately 5.8 million non-credit instructional activities (Table 22) provided to face-to-face groups in the State during the period of March, 1972 to March, 1973; and (d) the lecture/discussion mode of instruction addressing academic degree objectives accounted for over 18 percent of all instruction activities (Table 26).

The data pertaining to _purpose_ and _subject-matter_ of all post-secondary instructional activity are displayed in Tables 18-19. Instructional activities addressing academic objectives in Letters comprised the largest single proportion (22 percent), followed by non-credit general knowledge instruction in Recreation (9 percent), remedial instruction in Letters (5 percent), and academic degree instruction in Engineering and the Health Professions (4 percent). The translation of these proportions into estimates of the total number of instructional activities in the State is shown in Table 19.

A two-way frequency tabulation for these same variables in terms of all instructor time is shown in Table 20. The proportion of all instructor time in some areas exceeded the number of all instructional activities in those areas. For example, more than 3.5 percent of all instructor time was devoted to academic credit and to non-credit specific knowledge instructional activities in Education. In terms of the total number of instructional activities, these two subcategories accounted for 1.6 and 1.5 percent of the activities provided (Table 18). Other subject-matter/objective categories in which the proportion of instructor time exceeded the proportion of instructional activities conducted included: (a) academic credit activities in Business and

TABLE 18

PERCENT OF ALL INSTRUCTIONAL ACTIVITIES CLASSIFIED BY SUBJECT-MATTER AREA AND OBJECTIVE CATEGORIES

Subject-Matter of Instruction	Objective Addressed by Instructor: Degree	Diploma	Certification	General Knowledge	Specific Knowledge	Remedial	Special Education	Total Percent of all Instructional Activities
Agriculture	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.6
Architecture	0.8	0.0	0.2	0.0	0.0	0.0	0.0	1.0
Area Studies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bio Science	1.3	0.0	0.1	0.0	0.1	0.0	0.0	1.5
Bus/Mgmt	3.7	0.2	0.0	0.1	0.2	0.0	0.0	4.2
Communication	1.7	1.9	0.0	0.2	0.3	0.1	0.0	4.2
Computer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Education	1.6	0.0	0.3	0.0	1.5	0.0	0.0	3.4
Engineering	4.2	0.0	0.0	0.0	0.2	0.0	0.0	4.4
Fine/App Arts	2.1	0.7	0.0	1.6	3.5	0.0	0.6	8.5
For Language	0.5	0.0	0.0	0.0	0.6	0.0	0.0	1.1
Health Prof	4.0	0.0	0.9	0.0	0.1	0.0	0.0	5.0
Home Ec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Law	0.6	0.0	0.0	0.1	0.0	0.0	0.0	0.7
Letters	22.2	0.0	0.9	0.6	1.6	5.1	0.0	30.4
Lib Science	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Mathematics	1.8	0.5	0.0	0.0	0.0	0.0	0.2	2.5
Mil Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phy Science	2.7	0.0	0.0	0.0	0.0	0.0	0.0	2.7
Psychology	0.8	0.0	0.0	0.9	0.0	0.0	0.0	1.7
Pub Affairs	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Soc Science	0.6	0.4	0.0	0.0	0.0	0.0	0.0	1.0
Theology	0.6	0.0	0.0	0.6	0.9	0.0	0.1	2.2
Interdis	1.0	0.0	0.0	0.3	0.6	0.0	0.0	1.9
Recreation	0.0	0.0	1.9	9.3	2.5	0.0	0.9	14.6
Other	1.7	0.0	2.1	0.7	0.2	1.7	1.7	8.1
Total Percent of all Instructional Activities	52.0	3.9	6.4	15.0	12.3	6.9	3.5	100.0

TABLE 19

ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES BY OBJECTIVE AND SUBJECT-MATTER CATEGORIES

Subject-Matter	Objective							Total Number of Activities (in thousands)
	Degree	Diploma	Certification	General Knowledge	Specific Knowledge	Remedial	Special Education	
Agriculture	0	0	0	111	0	0	0	111
Architecture	139	0	28	0	0	0	0	167
Area Studies	0	0	0	0	0	0	0	0
Bio Science	236	0	14	0	14	0	0	264
Bus/Mgmt	652	28	0	14	42	0	0	736
Communication	305	333	0	42	55	14	0	749
Computer	0	0	0	0	0	0	0	0
Education	277	0	55	0	263	0	0	595
Engineering	735	0	0	0	28	0	0	763
Fine/App Arts	374	125	0	277	610	0	111	1497
For Language	83	0	0	0	111	0	0	194
Health Prof	707	0	166	0	14	0	0	887
Home Econ	0	0	0	0	0	0	0	0
Law	97	0	0	14	0	0	0	111
Letters	3883	0	166	111	277	887	0	5324
Lib Science	0	42	0	0	0	0	0	42
Mathematics	319	83	0	0	0	0	28	430
Mil Science	0	0	0	0	0	0	0	0
Phy Science	471	0	0	0	0	0	0	471
Psychology	139	0	0	166	0	0	0	305
Public Aff	14	0	0	0	0	0	0	14
Soc Science	111	69	0	0	0	0	0	180
Theology	97	0	0	97	166	0	14	374
Interdis	180	0	0	55	111	0	0	346
Recreation	0	0	333	1622	444	0	153	2552
Other	291	0	374	125	28	305	291	1414
Total Number of Activities	9110	680	1136	2634	2163	1206	597	17526

TABLE 20

PERCENT OF ALL INSTRUCTOR HOURS BY OBJECTIVE AND SUBJECT-MATTER CATEGORIES

Subject-Matter	Objective							Total Percent of All Instructor Hours
	Degree	Diploma	Certification	General Knowledge	Specific Knowledge	Remedial	Special Education	
Agriculture	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.8
Architecture	0.9	0.0	0.1	0.0	0.0	0.0	0.0	1.0
Area Studies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bio Science	1.1	0.0	0.1	0.0	0.1	0.0	0.0	1.3
Bus/Mgmt	4.7	0.3	0.0	0.1	0.3	0.0	0.0	5.4
Communication	1.5	1.3	0.0	0.5	0.2	0.1	0.0	3.6
Computer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Education	3.6	0.0	0.3	0.0	3.5	0.0	0.0	7.4
Engineering	6.1	0.0	0.0	0.0	0.2	0.0	0.0	6.3
Fine/App Arts	3.7	0.6	0.0	1.2	3.0	0.0	1.1	9.6
For Language	0.3	0.0	0.0	0.0	1.3	0.0	0.0	1.6
Health Prof	5.2	0.0	1.0	0.0	0.1	0.0	0.0	6.3
Home Econ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Law	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.6
Letters	15.8	0.0	0.9	0.5	1.0	3.7	0.0	21.9
Lib Science	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Mathematics	1.5	0.2	0.0	0.0	0.0	0.0	0.1	1.8
Mil Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phy Science	2.6	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Psychology	1.1	0.0	0.0	1.0	0.0	0.0	0.0	2.1
Public Aff	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Soc Science	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.9
Theology	1.4	0.0	0.0	0.7	1.1	0.0	0.1	3.3
Interdis	0.6	0.0	0.0	0.4	0.4	0.0	0.0	1.4
Recreation	0.0	0.0	1.2	7.6	1.5	0.0	0.5	10.8
Other	1.3	0.0	2.1	1.0	0.2	4.5	2.0	11.1
Total Percent of All Instructor Hours	52.5	2.9	5.7	14.[illegible]	12.9	8.3	3.8	100.1

Management, Engineering, Fine and Applied Arts, and the Health Professions; and (b) remedial or basic preparation activities in "Other" subject-matter areas.

The data pertaining to a cross tabulation of instructional activities by objective and medium of communication are shown in Tables 21-22. Probably the most striking conclusion is the exclusive use of one method of communication (face-to-face communication in a group) for instructional activities in four objective categories. The translation of the proportions into estimates of the number of instructional activities by medium of communication is shown in Table 22. When instructor time is analyzed in terms of these same two variables, the face-to-face group involved 90 percent of all instructor time (Table 23).

TABLE 21

PERCENT OF INSTRUCTIONAL ACTIVITIES CLASSIFIED BY OBJECTIVE AND METHOD

Type of Objective	Medium of Communication					Total Percent of Instructional Activities
	Written Evaluation	Design	Broadcast[1]	Film	Group	
Academic Degree	1.6	3.8	0.5	0.2	46.3	52.4
Voc/Gen Diploma	0.0	0.1	0.2	0.0	3.6	3.9
Certification	0.0	0.0	0.0	0.0	6.4	6.4
Gen Knowledge	0.0	0.0	0.0	0.0	14.8	14.8
Spec Knowledge	0.3	0.3	0.0	0.0	11.5	12.1
Remedial	0.0	0.0	0.0	0.0	6.8	6.8
Special Education	0.0	0.0	0.0	0.0	3.6	3.6
Total Percent of Instructional Activities	1.9	4.2	0.7	0.2	93.0	100.0

[1] Data pertaining to six broadcasting subcategories were consolidated in one category.

TABLE 22

ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES BY OBJECTIVE AND METHOD OF COMMUNICATION CATEGORIES

Type of Objective	Medium of Communication										Total Number of Activities (in thousands)
	Written Eval	Design	Live TV Open	Live TV Closed	TV Tape	Live Audio Open	Live Audio Closed	Re-cord-ing	Film	Group	
Academic Degree	280	679	14	0	70	0	0	0	42	8281	9366
Voc/Gen Diploma	0	14	0	0	0	0	28	0	0	641	683
Certification	0	0	0	0	0	0	0	0	0	1137	1137
Gen Knowledge	0	0	0	0	0	0	0	0	0	2626	2626
Spec Knowledge	55	55	0	0	0	0	0	0	0	2044	2154
Remedial	0	0	0	0	0	0	0	0	0	1202	1202
Special Educ	0	0	0	0	0	0	0	0	0	642	642
Total Number of Activities	335	748	14	0	70	0	28	0	42	16573	17810

TABLE 23

PERCENT OF ALL INSTRUCTOR HOURS BY OJECTIVE AND MEDIUM OF COMMUNICATION CATEGORIES

Type of Objective	Medium of Communication					Total Percent of All Instructor Hours
	Written Evaluation	Design	Broadcast[1]	Film	Group	
Academic Degree	2.3	5.5	0.5	0.3	46.1	54.7
Voc/Gen Diploma	0.0	0.0	0.3	0.0	2.4	2.7
Certification	0.0	0.0	0.0	0.0	5.4	5.4
Gen Knowledge	0.0	0.0	0.0	0.0	13.2	13.2
Spec Knowledge	0.2	0.3	0.0	0.0	11.7	12.2
Remedial	0.0	0.0	0.0	0.0	7.8	7.8
Special Education	0.0	0.0	0.0	0.0	3.8	3.8
Total Percent of All Instructor Hours	2.5	5.8	0.8	0.3	90.4	99.8

[1] Data pertaining to the broadcasting media were consolidated into one category.

An analysis of the data about objective and place of instruction shows that instructional activities for all objectives occurred primarily in a college or school facility (Table 24). Almost 47 percent of all instruction was concerned with academic degree objectives and occurred in a college or school. However, 3 percent of all instruction for academic degree purposes took place in a government facility. As for non-credit general knowledge and specific knowledge instruction, the college or school facility (including residential and extension centers) was the primary location of instruction for all objective categories. The corresponding estimates of instructional activities in the State by location are given in Table 25.

A cross tabulation of instructional activities by objective and mode of instruction is shown in Table 26. Academic instructional activities utilizing the lecture/discussion combination mode accounted for the largest single

TABLE 24

PERCENT OF ALL INSTRUCTIONAL ACTIVITY CLASSIFIED BY OBJECTIVE AND PLACE OF ACTIVITY CATEGORIES

	Place of Activity												Total Percent of All Instructional Activity
Objective	Church	Coll/ Univ	Govt	Cult	Vol Assn	Commercial	Broadcast	Labor	Bus	Home	En Route	Other	
Academic Degree	0.2	46.7	3.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.7	52.3
Voc/Gen Diploma	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
Certification	0.0	5.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4
Gen Knowledge	0.5	8.6	0.2	0.3	0.0	0.0	0.0	0.0	0.4	0.4	0.0	4.4	14.8
Spec Knowledge	0.3	10.4	0.1	0.6	0.2	0.0	0.0	0.0	0.0	0.6	0.0	0.0	12.2
Remedial	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8
Special Educ	0.1	3.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.6
Total Percent of All Instructional Activity	1.1	84.8	4.5	0.9	0.2	0.0	0.0	0.0	0.4	2.7	0.0	5.3	99.9

TABLE 25

ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES BY OBJECTIVE AND PLACE OF ACTIVITY CATEGORIES

Objective	Place of Activity												Total Number of Activities (in thousands)
	Church	Coll/ Univ	Govt	Cult	Vol Assn	Commer-cial	Broad-cast	Labor	Bus	Home	En Route	Other	
Academic Degree	42	8306	541	0	0	0	0	0	0	305	0	125	9319
Voc/Gen Diploma	0	679	0	0	0	0	0	0	0	0	0	0	679
Certification	0	957	180	0	0	0	0	0	0	0	0	0	1137
Gen Knowledge	97	1525	42	55	0	0	0	0	69	69	0	777	2634
Spec Knowledge	55	1844	14	111	28	0	0	0	0	111	0	0	2163
Remedial	0	1206	0	0	0	0	0	0	0	0	0	0	1206
Special Education	14	555	42	0	0	0	0	0	0	0	0	28	639
Total Number of Activities (in thousands)	208	15072	819	166	28	0	0	0	69	485	0	930	17777

TABLE 26

PERCENT OF INSTRUCTIONAL ACTIVITY CLASSIFIED BY OBJECTIVE AND MODE OF INSTRUCTION CATEGORIES

Type of Objective	Mode of Instruction								Total Percent of Instructional Activity
	Other	Lecture	Discuss	Workshop	Lecture/ Discuss	Lecture/ Workshop	Discuss/ Workshop	Lect/Disc/ Workshop	
Academic Degree	0.8	10.0	13.8	4.3	18.5	2.7	0.3	2.1	52.5
Voc/Gen Diploma	0.0	0.0	3.0	0.2	0.6	0.0	0.0	0.0	3.8
Certification	0.0	1.9	1.7	0.2	1.9	0.5	0.0	0.2	6.4
Gen Knowledge	0.0	10.2	1.6	0.4	2.1	0.0	0.0	0.5	14.8
Spec Knowledge	0.3	4.8	2.3	0.0	1.7	3.1	0.0	0.0	12.2
Remedial	0.0	0.0	2.9	0.0	3.9	0.0	0.0	0.0	6.8
Special Education	0.0	0.0	1.0	0.6	0.7	1.0	0.2	0.0	3.5
Total Percent of Instructional Activity	1.1	26.9	26.3	5.7	29.4	7.3	0.5	2.8	100.0

percentage (18) of all activities. The discussion mode for academic degree purposes accounted for almost 14 percent of all instruction. The lecture mode was used primarily for academic degree and non-credit general knowledge objectives; each category comprised more than 10 percent of all instruction. The translation into population estimates is displayed in Table 27. These same two variables were also analyzed in terms of all student hours spent in postsecondary instructional activity. The proportions and estimates are shown in

TABLE 27

ESTIMATED NUMBER OF INSTRUCTIONAL ACTIVITIES
BY OBJECTIVE AND INSTRUCTIONAL MODE

Type of Objective	Instructional Mode							Estimated Number (in thousands)
	Lecture	Discuss	Workshop	Lect/Disc	Lect/Wksp	Disc/Wksp	Lect/Disc/Workshop	
Academic Degree	1775	2454	763	3286	471	55	374	9178
Voc/Gen Diploma	0	541	28	111	0	0	0	680
Certification	333	305	28	333	97	0	42	1138
Gen Knowledge	1817	291	69	374	0	0	83	2634
Spec Knowledge	846	402	0	305	555	0	0	2108
Remedial	0	513	0	693	0	0	0	1206
Special Educ	0	180	111	125	180	42	0	638
Estimated Number (in thousands)	4771	4686	999	5227	1303	97	499	17582

Tables 28 and 29. Whereas the lecture/discussion mode for academic objectives had the largest percentage of instructional activities, more student hours were spent in lecture (21 percent) and discussion (17 percent) than in lecture/discussion (16 percent) in pursuit of academic credit objectives. The discussion and lecture/discussion modes are, however, used more for non-credit general knowledge and specific knowledge objectives than is the lecture.

TABLE 28

PERCENT OF ALL STUDENT HOURS BY OBJECTIVE AND INSTRUCTIONAL MODE CATEGORIES

Type of Objective	Instructional Mode							Total Percent of All Hours
	Lecture	Discuss	Workshop	Lect/ Disc	Lect/ Wksp	Disc/ Wksp	Lect/Disc/ Workshop	
Academic Degree	21.3	17.3	4.8	16.1	3.8	0.8	4.0	68.1
Voc/Gen Diploma	0.0	0.2	1.0	1.9	0.0	0.0	0.0	3.1
Certification	0.2	0.3	0.5	0.2	5.4	0.0	0.1	6.7
Gen Knowledge	2.0	3.8	1.6	3.6	0.0	0.0	0.3	11.3
Spec Knowledge	1.0	1.8	0.0	2.9	0.1	0.0	0.0	5.8
Remedial	0.0	0.4	0.0	1.7	0.0	0.0	0.0	2.1
Special Educ	0.0	1.4	0.4	0.1	0.8	0.1	0.0	2.8
Total Percent of All Hours	24.5	25.2	8.3	26.5	10.1	0.9	4.4	99.9

TABLE 29

ESTIMATED NUMBER OF STUDENT HOURS FOR ALL INSTRUCTIONAL ACTIVITY BY OBJECTIVE AND INSTRUCTIONAL MODE CATEGORIES

Type of Objective	Instructional Mode							Total Estimated Number (in thousands)
	Lecture	Discuss	Workshop	Lect/ Disc	Lect/ Wksp	Disc/ Wksp	Lect/Disc/ Workshop	
Academic Degree	38892	31486	8724	29356	6882	1465	7332	124137
Voc/Gen Diploma	0	431	1768	3524	0	0	0	5723
Certification	305	494	971	455	9915	0	92	12232
Gen Knowledge	3707	6939	2994	6535	0	0	542	20717
Spec Knowledge	1873	3257	0	5322	247	0	0	10699
Remedial	0	728	0	3043	0	0	0	3771
Special Educ	0	2640	818	116	1452	92	0	5118
Estimated Number (in thousands)	44777	45975	15275	48351	18496	1557	7966	182397

Use of Alternative Definitions of Post-Secondary Continuing Education

The previous sections reported the results from using various statistical techniques for analyzing the data. Examples of summary statistics and estimates for post-secondary instructional activity in the State were given.

The third technique for analyzing the data involved different conceptions of post-secondary continuing education. Again, summary statistics and estimates for the State will be used to provide descriptive data about different definitions of post-secondary continuing education and to compare and contrast continuing education activity with all post-secondary instruction.

The clear-cut distinction between what is adult and continuing education and what is not in colleges and universities is probably more blurred at this point in time than in any previous point in history. One reason is that the concept of "adult" is changing. One can now be legally considered an adult at the age of 18, whereas it was 21 only a few years ago. Also, during the late 1960's and early 1970's, colleges discarded the *in loco parentis* concept and acknowledged full-time residential undergraduate students as adults. Thus, most participants in post-secondary educational programs are now legally considered as adults.

A second reason why college and university continuing education and other university education programs are losing their distinct identities is the emergence of flexible organizational arrangements and non-traditional study programs. The education of adults and youth in colleges and universities now involves both groups on a full-time and part-time basis, on a credit and non-credit basis, in day and evening programs, in residential and in off-campus programs, and in the continuing education division of the university and often all other units of the university as well.

Traditionally, degree-credit programs for full-time students during the day was the domain of university "youth" education. Now, adult students are returning to participate full-time in degree programs, and many "youth" take courses during the evening hours as part of their academic program.

The domain of University Extension once consisted of the part-time degree-credit student, and the non-credit student. University Colleges--developed for the adult student--now attract many full-time students in their courses. The Graduate School and the professional school increasingly have had to accommodate a growing number of master's and doctoral students who take courses on a part-time basis. Also, all university units tend to engage in some form of non-credit instructional activity, if only an occasional lecture series. Many sponsor conferences and short courses as well.

The project team began initially with the following definition of post-secondary continuing education:

> . . . Post-secondary continuing education is considered to be any and all activities of an education nature engaged in by other than full-time undergraduate and graduate students who are traditionally enrolled in degree-credit, certificate, or diploma curricula. These activities include: courses (credit and non-credit, degree and non-degree); conferences (including institutes, short courses, seminars, lecture series, round tables, workshops); independent study and correspondence; counseling and guidance; radio, T.V., and multi-media programs; and community service programs.[1]

The broad scope of the activities referred to in the above definition, the changing definition of an adult, and the emerging flexibility of program offerings, structure, and requirements suggested that an examination of instructional activities in the dichotomy of "adult" and "youth" education would have little meaning in today's college or university. If the purpose of the study was to assist the Bureau of Special College Programs to develop a comprehensive plan for the future, it seemed unreasonable to restrict the sample of instructional activities or the individuals who were selected to respond to the reporting of instructional activities in continuing education units of colleges and universities.

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[1] Robert E. Williams, "A Plan to Provide Leadership for the Full Development of Post-Secondary Continuing Education in New York State." Unpublished manuscript, Bureau of Special College Programs, New York State Education Department, Albany, N.Y., 1971, p. 3.

An alternative might be to think in terms of four major divisions of the university or college, each concerned with learners who include both adult and youth. Division I might be concerned with degree-credit programs for full-time students; Division II would focus on degree-credit programs for part-time students; Division III would be concerned with non-credit programs for full-time students; and Division IV would handle all non-credit programs for part-time students.

The above scheme is based upon the assumptions that full-time and part-time students differ significantly in terms of: (a) their life roles, (b) their need for the institution to make accommodations to the student, and (c) their counseling needs. It is also assumed that faculty and administrators involved with the certification process (i.e., credits and degrees) have different concerns from those of faculty and administrators involved with learning activities without regard to credit, degrees, or certification.

Thus, in the analysis of the data, a decision was made to examine the data pertaining to instructional activities by different categories of adult learners. Such data could be compared and contrasted to the data pertaining to all instructional activities provided by colleges and universities if desired. Post-secondary continuing education, therefore, was defined in terms of three categories of adult learners:

1. Category I--The instructional activities included in Category I were all non-credit instructional activities where the majority of the participants in the instructional activity were 25 years of age or older. This was

considered a basic category which has been traditionally accepted by university personnel as "adult education."

2. Category II--This category included the instructional activities from Category I plus all instructional activities leading to an academic diploma, degree, or to a certificate where the majority of the participants in the instructional activity were 25 years of age or older. This category could include full-time students, but the students would be considered "adults" in the traditional sense since the majority were 25 years of age or older.
3. Category III--This category included the instructional activities from Category II plus all non-credit instructional activities involving the 17-24 age group where the majority of the learners were between 17 and 24 years of age.

It would also be possible to designate a Category IV--all instructional activities from Category III plus all instructional activities that lead to an academic diploma, degree, or to a certificate where the majority of the participants were 17 years of age or older. The definition of these or other categories permits the policy planner to select the data most appropriate for the situation.

Use of Category I Instruction as an Example

Using the distinctions indicated above, it was possible to examine in two ways just those data that involved instructional activities addressed to objectives without regard to diploma, certification, or degree requirements for adults 25 years of age or older. First, how does this category of instructional activity compare with or differ from all instructional activity reported? Thus, some tables will include data about Category I in the context of all instructional activity reported by the respondents. An example of displaying data in this context is Table 30.

In this particular table, four types of findings are presented. An example of each type of finding is given below. The data pertaining to each type of finding are circled in Table 30. The examples cited would be included among the important findings in Table 30. Example 1--All (100 percent) instructional activities in Business and Management, Law, Communications, and Interdisciplinary Studies addressing general knowledge objectives without regard to credit were found in Category I. Example 2--More than 37 percent of all instructional activities in Education were non-credit in nature and for participants 25 years of age and older. Example 3--Approximately 12 percent of all instructional activity addressing general knowledge, non-credit objectives was included in Category I. Example 4--Almost 6 percent of all instructional activity reported by the respondents was directed toward non-credit objectives for adults 25 years of age and older.

Second, what was the nature and scope of instructional activities in just this Category? In other tables, the statistics pertain only to Category I activities. Table 31, for example, displays the percentage of Category I instructional activities using various media of communication. Since we are examining all non-credit instructional activities for adults 25 years of age and older, three kinds of findings are of interest. The following examples are circled in the table. Example 1--Within the Category, 5 percent of the instructional activities addressing specific knowledge objectives involved designing or writing instructional materials. Example 2--Approximately one-half (48 percent) of the instructional activities in this Category addressed specific knowledge objectives without regard to academic credit. Example 3--Almost 95 percent of all non-credit instructional activities for adults were conducted within face-to-face groups.

TABLE 30

PERCENT OF ALL INSTRUCTIONAL ACTIVITIES COMPRISED OF CATEGORY I ACTIVITY BY SUBJECT-MATTER AND OBJECTIVE CATEGORIES

Subject-Matter of Instruction	Type of Objective Addressed by Instructor							Total Percent of all Instruction in Category I
	Degree	Diploma	Certification	Gen Knwldg	Spec Knwldg	Remedial	Spec'l Educ	
Agriculture	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0
Architecture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Area Studies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bio Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus/Mgmt	0.0	0.0	0.0	100.0	100.0	0.0	0.0	7.5
Communication	0.0	0.0	0.0	100.0	0.0	0.0	0.0	5.6
Computer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Education	0.0	0.0	0.0	0.0	84.2	0.0	0.0	37.2
Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fine/App Arts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
For Lang	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hlth Prof	0.0	0.0	0.0	0.0	100.0	0.0	0.0	1.6
Home Econ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Law	0.0	0.0	0.0	100.0	0.0	0.0	0.0	12.5
Letters	0.0	0.0	0.0	0.0	20.0	0.0	0.0	1.0
Lib Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	100.0	6.5
Mil Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phy Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Psychology	0.0	0.0	0.0	50.0	0.0	0.0	0.0	27.3
Pub Aff	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soc Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Theology	0.0	0.0	0.0	57.1	100.0	0.0	0.0	59.3
Interdis	0.0	0.0	0.0	100.0	0.0	0.0	0.0	16.0
Recreation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	50.0	9.1	47.6	12.7
Total Percent of All Instr. in Category I	0.0	0.0	0.0	12.1	23.7	2.3	27.9	5.9

Interpretation Note:

a. Read horizontally to determine, for each subject-matter area, the percentage of all instructional activities addressing different objectives that was included in Category I.

b. Read vertically to determine, for each objective category, the percentage of all instructional activities by each subject-matter area that was included in Category I.

TABLE 31

PERCENT OF CATEGORY I INSTRUCTIONAL ACTIVITIES CLASSIFIED BY OBJECTIVE AND MEDIUM OF COMMUNICATION

Type of Objective Addressed by Instructor	Medium of Communication					Total Percent in Category
	Written Eval	Design	Broadcast[1]	Film	Group	
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0
Gen/Voc Diploma	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0
General Knowledge	0.0	0.0	0.0	0.0	29.9	29.9
Specific Knowledge	0.0	5.2	0.0	0.0	42.8	48.0
Remedial	0.0	0.0	0.0	0.0	2.6	2.6
Special Education	0.0	0.0	0.0	0.0	19.5	19.5
Total Percent in Category I	0.0	5.2	0.0	0.0	94.8	100.0

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[1] Data pertaining to the six broadcasting categories listed previously were consolidated into one category for computing purposes.

The remainder of this section will be devoted to presenting selected findings about non-credit instruction for adults 25 years of age and older as they relate to (a) the number of instructional activities offered, (b) the number of instructor hours involved with these activities, (c) the number of student hours invested in the activities, and (d) the demographic composition of the students involved. The statistics were computed by tabulating two-way frequency tables for selected variables and converting the number of responses in each cell into proportions. The cross-tabulation procedure was discussed previously in this chapter, and an explanation of the general statistical procedures used is attached as Appendix F.

Using these approaches, other selected findings will be presented. The table which includes the supporting data will be cited; the specific data are also circled as a convenience to the reader. The interested reader may wish to examine other data as well. In terms of all post-secondary instructional activity, the instructional activities in Category I:

1. Comprised approximately 6 percent of all instructional activities offered from March, 1972 to March, 1973 (Table 30)
2. Accounted for approximately 28 percent of all instructional activity addressing special or custodial education objectives (Table 30)
3. Comprised approximately one-fourth of all instructional activities focusing on specific knowledge objectives relating to individual or institutional problems or interests without regard to diploma, certification, or degree requirements (Table 30)
4. Included 50 percent or more of all instructional activities offered in the areas of Theology and Agriculture, and 37 percent of all instructional activities in Education (Table 30)
5. Included all (100 percent) of the instructional activities in Business and Management, Communications, Law, and Interdisciplinary Areas addressing general knowledge objectives, and all instructional activities in Business and Management, Health Professions, and Theology addressing specific knowledge objectives (Table 30)
6. Included approximately 43 percent of all instructional activities using the discussion/workshop approach for teaching students (Table 32)
7. Involved 100 percent of all instructional activities conducted at a place of business, and 50 percent of all instructional activity held in churches and at voluntary association facilities (Table 35)
8. Included less than 3 percent of all remedial instruction (Table 30)
9. Was estimated to be greater than one million in New York State during the period March, 1972 to March, 1973 (Table 36).

As for just those instructional activities included in Category I:

1. Approximately 95 percent of all Category I instructional activity utilized

TABLE 32

PERCENT OF ALL INSTRUCTIONAL ACTIVITIES COMPRISED OF CATEGORY I ACTIVITY BY OBJECTIVE AND MODE OF INSTRUCTION CATEGORIES

Objective of Activity	Mode of Instruction Lecture	 Discuss	 Workshop	 Lect/Disc	 Lect/Wksp	 Disc/Wksp	 Lect/Disc/Workshop	Total Percent of All Instruction in Category I
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Voc/Gen Diploma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gen Knowledge	3.1	42.9	0.0	37.0	0.0	0.0	0.0	12.1
Spec Knowledge	27.9	62.1	0.0	9.1	0.0	0.0	0.0	23.7
Remedial	0.0	0.0	0.0	4.0	0.0	0.0	0.0	2.3
Special Educ	0.0	92.3	0.0	0.0	0.0	100.0	0.0	32.6
Total Percent of All Instruction in Category I	6.1	11.5	0.0	3.7	0.0	42.9	0.0	6.0

TABLE 33

PERCENT OF CATEGORY I INSTRUCTIONAL ACTIVITIES CLASSIFIED BY OBJECTIVE AND MODE OF INSTRUCTION

Objective of Activity	Mode of Instruction Lecture	 Discuss	 Workshop	 Lect/Disc	 Lect/Wksp	 Disc/Wksp	 Lect/Disc/Workshop	Total Percent in Category
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Voc/Gen Diploma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gen Knowledge	5.2	11.7	0.0	13.0	0.0	0.0	0.0	29.9
Spec Knowledge	22.1	23.4	0.0	2.6	0.0	0.0	0.0	48.1
Remedial	0.0	0.0	0.0	2.6	0.0	0.0	0.0	2.6
Special Educ	0.0	15.6	0.0	0.0	0.0	3.9	0.0	19.5
Total Percent in Category	27.3	50.7	0.0	18.2	0.0	3.9	0.0	100.1

TABLE 34

PERCENT OF CATEGORY I INSTRUCTIONAL ACTIVITIES CLASSIFIED BY OBJECTIVE AND PLACE OF ACTIVITY CATEGORIES

Type of Objective	Place of Activity Church	Col/ Univ	Govt	Cult	Vol Assn	Commer- cial	Broad- cast	Labor	Bus	Home	En Route	Total Per- cent in Category
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Voc/Gen Diploma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
General Knowledge	5.2	16.9	1.3	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	29.9
Specific Knowledge	5.2	29.9	1.3	0.0	1.3	0.0	0.0	0.0	0.0	10.4	0.0	48.1
Remedial	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Special Education	0.0	15.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.5
Total Percent in Category	10.4	65.0	6.5	0.0	1.3	0.0	0.0	0.0	6.5	10.4	0.0	100.1

TABLE 35

PERCENT OF ALL INSTRUCTIONAL ACTIVITIES COMPRISED OF CATEGORY I ACTIVITY BY OBJECTIVE AND PLACE OF ACTIVITY CATEGORIES

	Place of Activity											Total Percent of All Instn in Category I
Objective	Church	Col/ Univ	Govt	Cult	Vol Assn	Commercial	Broadcast	Labor	Bus	Home	En Route	
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Voc/Gen Diploma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
General Knowledge	57.1	11.8	33.3	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	12.1
Spec Knowledge	100.0	17.3	100.0	0.0	50.0	0.0	0.0	0.0	0.0	100.0	0.0	23.7
Remedial	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
Special Educ	0.0	30.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.6
Total Percent of All Instruction in Category I	53.3	4.6	8.5	0.0	50.0	0.0	0.0	0.0	100.0	22.9	0.0	6.0

TABLE 36

ESTIMATED NUMBER OF CATEGORY I INSTRUCTIONAL ACTIVITIES IN POPULATION BY OBJECTIVE AND SUBJECT-MATTER CATEGORIES

Subject-Matter of Instruction	Type of Objective Addressed by Instructor							Estimated Number of Activities (in thousands)
	Degree	Diploma	Certification	Gen Knowldg	Spec Knwldg	Remedial	Spec'l Educ	
Agriculture	0	0	0	55	0	0	0	55
Architecture	0	0	0	0	0	0	0	0
Area Studies	0	0	0	0	0	0	0	0
Bio Science	0	0	0	0	0	0	0	0
Bus/Mgmt	0	0	0	14	42	0	0	56
Communication	0	0	0	42	0	0	0	42
Computer	0	0	0	0	0	0	0	0
Education	0	0	0	0	222	0	0	222
Engineering	0	0	0	0	0	0	0	0
Fine/App Arts	0	0	0	0	0	0	0	0
For Language	0	0	0	0	0	0	0	0
Health Prof	0	0	0	0	14	0	0	14
Home Econ	0	0	0	0	0	0	0	0
Law	0	0	0	14	0	0	0	14
Letters	0	0	0	0	55	0	0	55
Lib Science	0	0	0	0	0	0	0	0
Mathematics	0	0	0	0	0	0	28	28
Mil Science	0	0	0	0	0	0	0	0
Phy Science	0	0	0	0	0	0	0	0
Psychology	0	0	0	83	0	0	0	83
Public Aff	0	0	0	0	0	0	0	0
Soc Science	0	0	0	0	0	0	0	0
Theology	0	0	0	55	166	0	0	221
Interdis	0	0	0	55	0	0	0	55
Recreation	0	0	0	0	0	0	0	0
Other	0	0	0	0	14	28	139	181
Total	0	0	0	318	513	28	167	1026

a face-to-face group as the medium of communication (Table 31)

2. Approximately one-half (48 percent) of Category I instructional activity addressed specific knowledge objectives relating to individual or institutional problems without regard to credit (Table 31)
3. One-half of the instructional activities used the discussion technique in teaching (Table 33)
4. Most (65 percent) took place at a college or university facility; the remaining one-third of the instructional activities was held in churches, private homes, places of business, and government and voluntary association facilities (Table 34).

The amount of instructor time spent in instruction was also of interest. Since the respondents reported the length of each activity, it was possible to determine the number of instructor hours involved in Category I instructional activities. As in the previous section, selected findings will be presented, and the tables including the supporting data will be identified. The findings are also circled as a convenience to the reader. In terms of all instructor time reported, the following findings emerged:

1. Nine percent of all instructor time (Table 37) was devoted to 6 percent of all instructional activities (Table 30)
2. More than 40 percent of all instructor hours spent addressing two types of objectives (specific knowledge relating to individual or institutional problems or interests without regard to credit, and special or custodial education) was included in Category I (Table 37)
3. Eight subject-matter areas (Agriculture, Education, Theology, Law, Interdisciplinary Studies, Other, Communications, and Psychology) were overrepresented in Category I as they accounted for more than 9 percent of all instructor time in their areas (Table 37)

TABLE 37

PERCENT OF ALL INSTRUCTOR HOURS INCLUDED IN CATEGORY I BY OBJECTIVE AND SUBJECT-MATTER CATEGORIES

Subject-Matter Area	Type of Objective Addressed by Instructor							Total Percent of All Hours in Category I
	Acad Degree	Voc/Gen Diploma	Certificate	Gen Knwldg	Spec Knwldg	Remedial	Spec'l Educ	
Agriculture	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0
Architecture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Area Studies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bio Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus/Mgmt	0.0	0.0	0.0	100.0	100.0	0.0	0.0	7.1
Communication	0.0	0.0	0.0	100.0	0.0	0.0	0.0	13.2
Computer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Education	0.0	0.0	0.0	0.0	94.8	0.0	0.0	44.3
Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fine/App Arts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
For Language	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Prof	0.0	0.0	0.0	0.0	100.0	0.0	0.0	1.0
Home Econ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Law	0.0	0.0	0.0	100.0	0.0	0.0	0.0	28.6
Letters	0.0	0.0	0.0	0.0	30.0	0.0	0.0	1.4
Lib Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	100.0	4.2
Mil Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phy Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Psychology	0.0	0.0	0.0	26.6	0.0	0.0	0.0	12.8
Public Aff	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soc Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Theology	0.0	0.0	0.0	30.8	100.0	0.0	0.0	40.8
Interdis	0.0	0.0	0.0	100.0	0.0	0.0	0.0	27.9
Recreation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	57.1	2.7	76.5	15.9
Total Percent of All Hours in Category I	0.0	0.0	0.0	14.2	40.3	1.4	42.6	8.9

4. Two instructional modes--the discussion/workshop combination and discussion--were over-represented in Category I. They comprised 48 percent and 18 percent respectively of all instructor time using those means of instruction. This was five and two times greater than the 9 percent of all instructor time included in the Category (Table 38).

An examination of the number of instructor hours involved in just Category I instructional activities also revealed certain findings of interest.

1. The discussion mode of instruction was used during almost two-thirds of all Category I time spent in instruction (Table 39)
2. Ninety-six percent of all instructor time in Category I activities was spent in face-to-face groups (Table 40)
3. An estimated 2.4 million instructor hours were provided to adult students seeking non-credit instruction during the period March, 1972 to March, 1973 (Table 41).

Additional insight into the nature of post-secondary continuing education was obtained by examining the amount of time invested by students in Category I instructional activity. The amount of student time was computed from data provided by the respondent concerning the length of the activity and the number of students in the activity. In some cases it was impossible to provide the exact number of participants and the number reported represented the best estimate of the respondent. The procedures for analyzing the raw data were described previously. The data were again examined in terms of (a) all post-secondary instructional activity, and (b) non-credit instructional activity for adults 25 years and older (also referred to as Category I instructional activity).

Selected findings in terms of all student hours--circled in the tables indicated--which were of interest were:

TABLE 38

PERCENT OF ALL INSTRUCTOR HOURS INCLUDED IN CATEGORY I BY OBJECTIVE AND MODE OF INSTRUCTION CATEGORIES

	Mode of Instruction							Total Percent of All
Type of Objective	Lecture	Discuss	Workshop	Lect/ Disc	Lect/ Wksp	Disc/ Wksp	Lect/Disc/ Workshop	Hours in Category I
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Voc/Gen Diploma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gen Knowledge	2.5	33.1	0.0	48.0	0.0	0.0	0.0	14.2
Spec Knowledge	35.2	82.1	0.0	8.1	0.0	0.0	0.0	41.0
Remedial	0.0	0.0	0.0	1.9	0.0	0.0	0.0	1.4
Special Educ	0.0	96.9	0.0	0.0	0.0	100.0	0.0	46.3
Total Percent of All Hours in Category I	7.1	18.3	0.0	5.3	0.0	48.4	0.0	8.8

TABLE 39

PERCENT OF CATEGORY I INSTRUCTOR HOURS BY OBJECTIVE AND INSTRUCTIONAL MODE CATEGORIES

	Mode of Instruction							Total Per-
Type of Objective	Lecture	Discuss	Workshop	Lect/ Disc	Lect/ Wksp	Disc/ Wksp	Lect/Disc/ Workshop	cent in Category
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Voc/Gen Diploma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gen Knowledge	2.2	6.4	0.0	12.9	0.0	0.0	0.0	21.5
Spec Knowledge	17.7	37.3	0.0	1.8	0.0	0.0	0.0	56.8
Remedial	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.3
Special Educ	0.0	17.7	0.0	0.0	0.0	2.8	0.0	20.5
Total Percent in Category	19.9	61.4	0.0	16.0	0.0	2.8	0.0	100.1

TABLE 40

PERCENT OF CATEGORY I INSTRUCTOR HOURS BY OBJECTIVE AND MEDIUM OF COMMUNICATION CATEGORIES

Type of Objective	Medium of Communication					Total Percent in Category
	Written Eval	Design	Broadcast[1]	Film	Group	
Academic Degree	0	0	0	0	0	0
Voc/Gen Diploma	0	0	0	0	0	0
Certification	0	0	0	0	0	0
Gen Knowledge	0	0	0	0	22	22
Spec Knowledge	0	3	0	0	53	56
Remedial	0	0	0	0	1	1
Special Educ	0	0	0	0	20	20
Total Percent in Category	0	3	0	0	96	99

[1] Data pertaining to the broadcasting media were consolidated into one category.

TABLE 41

ESTIMATED NUMBER OF INSTRUCTOR HOURS IN CATEGORY I INSTRUCTIONAL ACTIVITIES BY OBJECTIVE AND INSTRUCTIONAL MODE CATEGORIES

Type of Objective	Mode of Instruction							Total (in thousands)
	Lecture	Discuss	Workshop	Lect/Disc	Lect/Wksp	Disc/Wksp	Lect/Disc/Workshop	
Academic Degree	0	0	0	0	0	0	0	0
Voc/Gen Diploma	0	0	0	0	0	0	0	0
Certification	0	0	0	0	0	0	0	0
Gen Knowledge	55	158	0	319	0	0	0	532
Spec Knowledge	437	922	0	44	0	0	0	1403
Remedial	0	0	0	32	0	0	0	32
Special Educ	0	437	0	0	0	69	0	506
Total	492	1517	0	395	0	69	0	2473

1. Approximately 6 percent of all student hours were engaged in Category I instructional activity (Table 42)
2. Approximately 50 percent of all student hours spent in addressing each of two types of objectives (specific knowledge and special education) occurred in this Category (Table 42)
3. Almost 12 percent of all student hours spent in the discussion mode of instruction was included in Category I activity (Table 42).

As for findings concerning student hours in Category I activity, the following emerged:

1. More than 80 percent of all student hours in Category I involved just two modes of instruction--discussion (48 percent), and lecture/discussion combination (34 percent) (Table 43)
2. The face-to-face group was the medium of instruction used for nearly all (99.7 percent) student hours in this Category (Table 44)
3. It was estimated that adults 25 years of age and over spent approximately 11.2 million hours in instructional activities that addressed non-credit objectives during the period March, 1972 to March, 1973 (Table 45).

What do we know about the participants in post-secondary continuing education? By definition, Category I instructional activities consisted of non-credit instruction offered to adults 25 years of age and over. Compared to the participants in all instructional activities, there were proportionally more women and more members of the white race who were participants in this category of post-secondary education. Seventy-one percent of the participants were between the ages of 25 and 44. Although the instruction was without regard for credit, approximately 80 percent of the participants had completed 15 years of schooling and almost 50 percent were college graduates. Approximately 19 percent of the participants had completed 12 years of school; this

TABLE 42

PERCENT OF ALL STUDENT HOURS INCLUDED IN CATEGORY I BY OBJECTIVE AND INSTRUCTIONAL MODE CATEGORIES

Type of Objective	Mode of Instruction							Total Percent of All Hours in Category I
	Lecture	Discuss	Workshop	Lect/Disc	Lect/Wksp	Disc/Wksp	Lect/Disc/Workshop	
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Voc/Gen Diploma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gen Knowledge	1.9	5.5	0.0	43.2	0.0	0.0	0.0	15.8
Spec Knowledge	95.8	76.9	0.0	18.4	0.0	0.0	0.0	49.3
Remedial	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.4
Special Educ	0.0	94.7	0.0	0.0	0.0	100.0	0.0	50.7
Total Percent of All Hours in Category I	4.2	11.7	0.0	8.0	0.0	5.9	0.0	6.1

TABLE 43

PERCENT OF CATEGORY I STUDENT HOURS BY OBJECTIVE AND INSTRUCTIONAL MODE CATEGORIES

Type of Objective	Mode of Instruction							Total Percent in Category
	Lecture	Discuss	Workshop	Lect/Disc	Lect/Wksp	Disc/Wksp	Lect/Disc/Workshop	
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Voc/Gen Diploma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gen Knowledge	0.6	3.4	0.0	25.2	0.0	0.0	0.0	29.2
Spec Knowledge	16.0	22.4	0.0	8.8	0.0	0.0	0.0	47.2
Remedial	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
Special Educ	0.0	22.3	0.0	0.0	0.0	0.8	0.0	23.1
Total Percent in Category	16.6	48.1	0.0	34.4	0.0	0.8	0.0	99.9

TABLE 44

PERCENT OF CATEGORY I STUDENT HOURS BY OBJECTIVE AND MEDIUM OF COMMUNICATION CATEGORIES

Type of Objective	Medium of Communication Written Eval	Design	Broadcast[1]	Film	Group	Total Percent in Category
Academic Degree	0.0	0.0	0.0	0.0	0.0	0.0
Voc/Gen Diploma	0.0	0.0	0.0	0.0	0.0	0.0
Certification	0.0	0.0	0.0	0.0	0.0	0.0
Gen Knowledge	0.0	0.0	0.0	0.0	29.3	29.3
Spec Knowledge	0.0	0.3	0.0	0.0	46.8	47.1
Remedial	0.0	0.0	0.0	0.0	0.4	0.4
Special Educ	0.0	0.0	0.0	0.0	23.2	23.2
Total Percent in Category	0.0	0.3	0.0	0.0	99.7	100.0

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[1] Data pertaining to the broadcasting media were consolidated into one category.

TABLE 45

ESTIMATED NUMBER OF STUDENT HOURS IN CATEGORY I INSTRUCTIONAL ACTIVITIES BY OBJECTIVE AND MODE OF INSTRUCTION CATEGORIES

Type of Objective	Mode of Instruction Lecture	Discuss	Workshop	Lect/Disc	Lect/Wksp	Disc/Wksp	Lect/Disc/Workshop	Total Hours (in thousands)
Academic Degree	0	0	0	0	0	0	0	0
Voc/Gen Diploma	0	0	0	0	0	0	0	0
Certification	0	0	0	0	0	0	0	0
Gen Knowledge	69	384	0	2822	0	0	0	3275
Spec Knowledge	1795	2505	0	980	0	0	0	5280
Remedial	0	0	0	44	0	0	0	44
Special Educ	0	2501	0	0	0	92	0	2593
Total Hours	1864	5390	0	3846	0	92	0	11192

corresponded to almost 2.2 million adults who engaged in non-credit instruction during the period of the study.

Thus, the "typical participant" in Category I instructional activity was a white male between the ages of 25 and 34 who had completed a bachelor's degree. The proportions of Category I participants in the various subcategories pertaining to age, sex, race, and number of prior years of school completed are shown in Table 46. The estimates for the total Category I population are shown in Table 47.

TABLE 46

DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS
IN CATEGORY I INSTRUCTIONAL ACTIVITIES
(in percentages)

Sex	Male	Female						
A.	55.0	45.0						
Racial Group	American Indian	American Oriental	Black American	Spanish Surnamed	Caucasian	Other		
B.	0.0	0.1	4.4	1.8	92.9	0.7		
Age	Under 17	17 – 24	25 – 34	35 – 44	45 – 54	55 - 64	65 and over	
C.	0.0	5.5	47.6	26.7	12.7	7.4	0.0	
Prior Years of School Completed	None	K – 7	8	9 – 11	12	13 – 14	15 – 16	over 16
D.	0.0	0.1	0.0	0.5	18.8	1.3	31.9	47.5

TABLE 47

ESTIMATED NUMBER OF PARTICIPANTS IN CATEGORY I INSTRUCTIONAL ACTIVITIES[1]
(in thousands)

Sex	Male	Female						
A	9,388	7,696						
Racial Group	American Indian	American Oriental	Black American	Spanish Surnamed	Caucasian	Other		
B	0	14	610	250	12,711	97		
Age	Under 17	17 – 24	25 – 34	35 – 44	45 – 54	55 – 64	65 and over	
C	0	915	7,862	4,410	2,094	1,220	0	
Prior Years of School Completed	None	K – 7	8	9 – 11	12	13 – 14	15 – 16	over 16
D	0	14	0	55	2,246	153	3,813	5,685

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[1] The estimated number of participants was based only on reported data. The totals for the different variables may not coincide because missing data were not replaced by estimates but were computed as a zero.

Use of the Data in Planning Post-Secondary Continuing Education

The determination of needs for continuing education involves the collection of three types of data. One type--information about the current situation--was collected in this study of post-secondary instructional activities. Studies of the current nature and scope of post-secondary continuing education provide an essential starting point for any long-range planning activity but are not, by themselves, capable of determining future goals or priorities.

The second type of information concerns the desired state of affairs (what the program should or ought to be). Such data, while often readily accessible, may be overly idealistic, opinionated, or highly controversial. Planners have frequently relied on the opinions and values of panels of experts to set standards of excellence. These standards, however, are often rejected by the persons who are directly involved in the proposed change. The Focus Delphi technique, described in the next chapter, is one way whereby different groups of people can be queried about the desirability of a proposed goal or change.

The gap or difference between the actual state of affairs and the desired state of affairs becomes the "need"--the third type of information essential for planning. Needs can neither be entirely based on data nor completely value-free. The specification of program needs involves weighing the data and societal values against what is politically feasible.

Thus, the primary contribution of this study was to provide data for policy planners about the current status of post-secondary continuing education so that better-informed decisions could be made about the future. The data were deliberately collected within the context of all post-secondary education since continuing education must operate within the institutional system.

In the following paragraphs, three questions pertaining to the future of post-secondary continuing education will be raised for the consideration of policy planners and their advisors. Each question will be based on one or more findings from the data. For each question, the planners will want to ask questions such as: "Is this a desirable situation?" "If not, what could be?" "What should be?" "How feasible is the desired change?" "What priority does the desired change have in terms of all desirable goals?"

Query One: Who Is Presently Not Being Served Through Post-Secondary Continuing Education?

Although it is impossible to make exact comparisons between the characteristics of the participants in the sample and the population of New York State, the Census data can be used for making approximate comparisons. Table 48 presents data concerning the proportions of participants by racial categories for all instructional activities, and Categories I, II, and III activities. When compared to the Census data, it was concluded that post-secondary education institutions are providing more instructional activities, proportionally, for members of the white (Caucasian) and "other" (e.g., Oriental, American Indian) races than for black American and Spanish surnamed persons in New York State. Stated another way, members of the white and "other" races will be overrepresented as participants in post-secondary instructional activities, and members of the black race and persons with Spanish surnames will be underrepresented when their respective proportions of the total population are considered.

Comparisons between the proportions of the New York State population and the participants in the sample of instructional activities also show disparities among the age groups in the State if the intent of post-secondary education institutions is to provide a comprehensive plan for lifelong learning for all citizens of the State. The percentages shown from the Census data were computed using the entire population as a base. Therefore, if the percentages had been computed from an adult and youth population comparable to the

TABLE 48

COMPARISON OF RACIAL COMPOSITION OF PARTICIPANTS IN INSTRUCTIONAL ACTIVITIES IN SAMPLE WITH NEW YORK STATE POPULATION

Race	Census Data[1]	All Activities	Categories[2] I	II	III
White	84.1	86.0	92.9	90.1	90.7
Black	10.8	7.1	4.4	5.3	5.0
Spanish surname	4.2	3.4	1.8	2.5	2.1
Other	1.0	3.6	0.8	2.2	2.3

[1] Computed from data pertaining to persons 15 years and older. Source: U.S. Bureau of the Census. Census of Population: 1970. General Social and Economics Characteristics. Final Report PC(1)-C34 New York. (Washington, D.C.: U.S. Government Printing Office, 1972), p. 293.

[2] For data pertaining to Categories II and III, see Appendix G.

sample, the percentages would have been even larger. The disparities are most pronounced for adults over age 55. Clearly, the post-secondary education institutions are not serving the older adult in the same proportions as they are represented in the New York State population. Table 49 presents the percentages of persons by age categories for New York State and for participants in all instructional activities and Categories I, II, and III activities sampled in this study.

The planners may decide that the current situation just described is what ought to be and that no change in policy is needed. Or, a need for change may be desirable, but the proposed change may be inappropriate or not feasible because of poor timing, low priority, a lack of political support, or other reasons. A third alternative course of action would be to accept the need to

TABLE 49

COMPARISON OF THE PERCENTAGES OF PERSONS BY AGE CATEGORIES FOR NEW YORK STATE AND FOR PARTICIPANTS IN THE INSTRUCTIONAL ACTIVITIES IN SAMPLE

			Categories[2]		
Age Category	Census Data[1]	All Activities	I	II	III
Under 17		9.7	0.0	1.8	1.2
17 to 24 years		71.0	5.5	12.7	49.6
25 to 34 years	12.3	11.6	47.6	47.0	27.1
35 to 44 years	11.8	4.8	26.7	23.0	13.3
45 to 54 years	12.2	2.0	12.7	10.6	6.0
55 to 64 years	10.1	0.8	7.4	4.6	2.6
Over 65 years	10.7	0.05	0.0	0.3	0.2

[1] Percentage represents the proportion of all persons in New York State whose age falls within the given category. The missing percentages could not be computed because of dissimilar categories. Source: (same as table above)

[2] For data pertaining to Categories II and III, see Appendix G.

offer more educational opportunities for certain audiences (e.g., certain age and racial groups). This could be facilitated through actions such as providing funds to post-secondary institutions to: (a) study the interests and barriers to participation by the target audiences, (b) support program development activities for the target audiences, and (c) reduce or remove any tuition costs for the participants. The specific policy or course of action selected will vary from situation to situation because of variation in tradition, in the importance of various social forces, and in readiness to change.

Query Two: To What Extent is Post-Secondary Continuing Education Time and Space-Free?

The study data showed that almost all instructional activity was conducted in face-to-face group settings and within college and university facilities. Very few instructional activities used media of communication that would facilitate independent study, or learning through the mass media. Also, the use of non-college facilities as locations for learning occurred for only 35 percent of the non-credit offerings for adults 25 years of age and older. These findings suggest questions as to "what ought to be the situation regarding the place and medium of adult learning."

1. Should continuing education do anything to assist the adult who desires to undertake self-planned learning or who prefers independent study?
2. Should the college or university increase its non-traditional instructional offerings for adults who travel, whose work schedules conflict with course offerings, or who are home-bound because of responsibility or physical condition?
3. Should continuing education develop a library of independent study materials such as single concept films, audio cassettes, video tapes, etc.?
4. Should continuing education offer more instruction over television or radio?
5. Should instructors be rewarded for providing learning opportunities that are free of time and space constraints?

Again, answers to questions such as these which were suggested by the data depend upon the values of the leaders and policy planners in post-secondary education. Tradition and satisfaction with current practice may result in a lack of leadership and resources for expanding the number of instructional activities that have greater flexibility as to when and where the learning activity could be undertaken. On the other hand, the emerging interest in non-traditional learning is stimulating some institutions to provide alternatives to the format that was designed for the full-time, in-residence student between 18 and 22 years old.

Query Three: To What Extent Should Post-Secondary Institutions Engage in Continuing Education?

Post-secondary institutions have been, on the one hand, traditionally involved in continuing education, but, on the other hand, have never accepted continuing education as the primary purpose of the institution. Adult and continuing education has, for some critics, occupied only a marginal place in the system since it has been ineffective in competing for status and rewards from the system against research and the teaching of full-time, in-residence students.

This study attempted to examine continuing education within the context of the post-secondary education system. Continuing education (as defined by Category I--non-credit instruction for adults 25 years of age and older) accounted for approximately 6 percent of all instructional activity, 9 percent of all instructor time, and 6 percent of all student hours in all post-secondary instructional activity studied. If all instruction for credit for adults 25 years of age and over is added (Category II), then approximately 17 percent of instructional activities were included.

What ought to be the amount of continuing education activity provided by post-secondary institutions? Is 6 percent of all activity adequate? Or 17 percent? Can this level of activity be expected to meet the need for continuing education that has been mandated by certain professions? Or the need for minority group adults and women to acquire appropriate skills and credentials for vocational and professional advancement? Can the increasing proportion of older adults expect the post-secondary institution to provide learning opportunities during pre-retirement and post-retirement years?

It seems likely that the tax-paying public will expect more instruction from post-secondary institutions. What policies and long-range goals will assist the institutions to accommodate the increasing number of adult learners? How should new monies be spent and old monies be redirected? How many and what kinds of personnel are needed? How should continuing education activity be rewarded by the system?

The three general questions were posed above to illustrate how information about the current situation assists in long-range planning. The data, as we have seen, do not answer questions about needs. Rather, the various findings must be examined in light of societal values and notions of "the good." Once standards of excellence are identified, and agreed to, it is possible to state what the needs (or gaps between the actual and desired situations) are. The task is not yet done, however, with the needs defined. Alternative goals and strategies for achieving the goals must be identified and examined in terms of their various consequences.

Conclusions

The results of this study bear on the interests of the project sponsor and the research team in (a) methodological and (b) substantive issues. The methodology was of interest because the process of determining educational needs for adult and continuing education is complex, and, at this stage of time, more of an art than a science. The substantive findings were of interest because of their utility for planning post-secondary continuing education in

New York State. Additional knowledge about the need determination process, and the educational needs in the State would assist institutional and State planners as they attempt to meet the adult's interests and needs for continuing education.

This section will address six issues. Each issue will be described briefly; the experiences of the research team with the issue and appropriate findings will be reviewed. These conclusions should be associated with the director of the study and not with the entire project team. The issues of interest are: (1) need for the data, (2) the data-collection methodology, (3) the sampling procedure, (4) the methods for analyzing the data, (5) the substantive findings from the study, and (6) financing continuing education.

Is There A Need For More Data About Continuing Education?

Throughout the study, it has been argued that more and better quality data are needed for planning purposes in post-secondary continuing education. Too little is known about the inputs and outputs of continuing education programs, the relative importance of continuing education in all post-secondary education institutions, and the costs of continuing education. Since advisory committee members often choose to emphasize and push for programs of interest to individual members, the policy planner who seeks to provide a comprehensive State program is at a disadvantage when only limited data are available.

At no time during the study did the need for desired information diminish. If anything, the investigators became aware of the number of situations where decisions were being made in the absence of information. The recent interest in, and the amount of resources being used for, developing management information services provides further evidence that top management increasingly recognizes the value of data for planning purposes.

Three conclusions were reached as a result of this issue. First, two kinds of information are essential in determining needs (the difference between some present state of affairs and some desired state of affairs). This study sought information about the current situation in post-secondary continuing education. However, these data must be supplemented with information about the desired state of affairs in order to determine needs. Few organizations and program directors have attempted to identify or have collected data about those standards of excellence that continuing education should strive to attain. Nevertheless, the availability of descriptive data about the current situation provides an avenue for asking questions as to "What ought to be?"

Second, there is a need for information that is collected in the context of all post-secondary education. One issue that confronted the research team at the outset of the study was whether to collect data from just continuing education instructors or from all persons providing post-secondary instructional activity. The latter source was considered preferable because it was felt that (a) not all continuing education activity was conducted through the unit designated for providing continuing education, and (b) knowledge was needed about the relationship of continuing education to all post-secondary education. These two beliefs are still considered valid. If change needs to occur within the post-secondary education system, then data showing the relative position of continuing education would be essential. The finding that only 6 percent of all post-secondary education is devoted to non-credit instruction for adults 25 years of age and older would be of concern to most planners and continuing education leaders.

Third, appropriate resources will be required for obtaining data on educational needs. These data will seldom be available from existing data-collection systems. The nature of need determination studies will no doubt vary from one time to another because the problems of adults and society are dynamic rather than static.

In summary, data about educational needs of adults is a continuous and increasingly important element in long-range planning for continuing education. While certain data will focus on individual and societal problems, other data are required from the post-secondary education system. The costs of acquiring these data will increase because this task involves an additional expenditure of funds in most institutions.

Was the Data-Collection Strategy Appropriate?

A mailed, self-administered questionnaire was used to collect the data. The rate of response (53 percent of all questionnaires that could be delivered) suggests that other data-collection procedures might have been more effective.

A major difficulty in obtaining a high response rate seemed to lie with the attitude of the respondent rather than with the data-collection method selected. While it would involve more additional resources than were committed to this study, it would seem essential to personally contact each respondent in future studies of this nature in order to create a positive attitude toward the study and some level of commitment to it. Perhaps it will not be necessary actually to pay the respondent for completing questionnaires or granting interviews in some studies, but it may be necessary in other studies.

Improvements can always be made in the instrumentation used. The development of an effective and efficient data-gathering device should continue to be a priority research problem in adult and continuing education.

The face validity of the information collected was satisfactory for most of the variables. The most useful information pertained to six variables (length of activity, objective, medium of communication, instructional mode used, place of the activity, and the number of activities). Variables in which responses were open to some question but still considered valid and useful were essentially three: (a) the subject-matter area of the activity (because of the large number of "Other" subject-matter areas reported), (b) the number of participants (because it was necessary to estimate the number in some instances), and (c) information about the demographic characteristics of the participants (again, because it was necessary to estimate in large audiences). There were two variables for which the information received was considered less useful and valid. The subcategories pertaining to the prerequisites required of learners for participation and to the ways of financing instructional activities did not provide useful data. Other tests for validity (particularly content validity) should be a concern when adequate time and financial resources are available.

More information would also be useful about the reliability of the data. Test-retest correlations would lend additional confidence to the estimates for the State that are extrapolated from the raw data.

In summary, the attitude of the respondent toward providing the data seemed to be the major problem in collecting the data. The response rate was lower than desired, although a higher response rate may have been unduly optimistic. However, improvement of the response rate has to be the primary concern in similar studies in the future. Other changes that improve the validity and reliability of the data would be desired refinements.

Should a Different Sampling Procedure Be Used?

A complex sampling procedure was used to identify the individuals who would be queried about their instructional activities. Both individuals and time periods were sampled. The study sample actually was composed of two subsamples so that certain statistics could be obtained.

The two basic questions that must first of all be answered are: "To what level is it desirable to generalize the findings?" and "What resources are available for conducting the study?" Once the answers to these two questions have been obtained, a decision needs to be made as to whether the available resources are adequate.

Given the purposes of this study, the desire to generalize for all post-secondary education in the State still seems to be valid. The decision to query a sample rather than the entire population would seem to be the most practical alternative considering the resources that would be needed to include each faculty and professional staff member in the 229 post-secondary institutions in the State.

The decision to include all faculty and staff in post-secondary educational institutions in the population also can be defended if the concern is with the nature and scope of all post-secondary continuing education. If the concern is only with the instructional activities of continuing education units, then the population can be restricted accordingly.

As for the size of the sample (N=867), the percentage of the nonrespondents (46 percent) no doubt affected the amount of confidence in the data. Certainly, the national opinion polls include smaller percentages of the population studied in their surveys. The low response rate emerged as a more important concern than the sample size.

The sampling of time also seems to be appropriate since continuing education occurs throughout the year. Longitudinal studies, while more difficult to implement, are more likely to provide higher quality data than cross-sectional studies. The major disadvantage is that it takes longer to complete a longitudinal study than a cross-sectional study.

The idea of improving the sensitivity of response by assigning one to five reporting weeks based upon the degree of continuing education instructional activity also seems theoretically sound. Unless the respondents are committed to the study, however, it may present a practical problem (i.e., a lower response rate). The investigator may have to choose between a high response rate and an improved sensitivity of response. A statistician would interpret a high response rate as enhancing the reliability of the data.

Given the financial resources for conducting the study, the size of the sample was probably too large. A questionnaire is an impersonal, and sometimes threatening, device. A smaller sample in fewer institutions would have permitted more personal contact with respondents, either in collecting the data through personal interviews or in explaining the data-collection procedures in a face-to-face setting. It became obvious that adequate resources had not been requested for creating among respondents a favorable attitude toward and a commitment to participate in the study.

In summary, the sampling procedures used, while somewhat complex, did result in a stratified sample of faculty and staff. This was accomplished without an available master list of all faculty and staff in post-secondary education. The sample size seemed to be less of an issue than the 53 percent response rate. While the intent to generalize for post-secondary continuing education in the State was valid, the resources required for this task were inadequate. More resources were needed to develop favorable attitudes and a commitment to participate in the survey on the part of the respondents.

How Can the Data Be Analyzed?

The raw data were tabulated in two-way frequency tables, converted into percentages, translated into estimates for the State, and analyzed according to different definitions of continuing education. These statistical techniques were selected because the analysis would summarize the data in ways that they could be used effectively.

The response rate of 53 percent was recognized as was its probable effect upon the reliability of the data. However, it could be argued that the description presented of post-secondary education in the State by the data is conservative. This position is based on the experiences with non-respondents. Persons with no instructional activity to report were more likely to respond to repeated requests than were those having instructional activity to report.

The percentages were useful in showing the relative location of subsets of a major variable. The statistic that 6 percent of all post-secondary instruction involved non-credit instruction for adults 25 years of age and older is only one of many examples. The cross-tabulation analysis provided similar data but for two variables. Thus, it was possible to determine the proportion of all instructional activities using various instructional modes for the various categories of objectives.

The technique for translating the raw data into estimates for the State can also be useful in illustrating the scope of post-secondary continuing education. The sampling procedure was conducted in such a way that the appropriate computations could be made. A higher response rate, however, would have permitted more confidence in the estimates.

Care must be taken to interpret the estimated data according to the definitions used in the study. The number of instructional activities, for example, refers to the number of continuous contacts (such as a meeting, lecture, presentation, demonstration) between an instructor and one or more learners rather than the number of courses, conferences, programs, etc.

The notion of alternative definitions of continuing education provided yet another way of analyzing the data. Since an operational definition of continuing education could vary from institution to institution, such an approach presented more than one option for examining continuing education activity. An example of one approach was the presentation of data pertaining to non-credit instruction primarily for adults 25 years of age and older which was presented earlier.

Planners and continuing education leaders could learn, for example, the type of objectives addressed, the methods used, and something of the student body involved. Other definitions of continuing education were suggested and could be used if desired.

In summary, four ways of analyzing the data were illustrated. Each technique was used because of its capability to "summarize" and to "generalize." The techniques are limited primarily by the reliability and validity of the data. As with any presentation of data, the user must "massage" and interact with the data so that it can be used most effectively.

What Use Can Be Made of the Findings?

Although methodological issues emerged as the primary focus of the study, descriptive data pertaining to the nature and scope of post-secondary continuing education were also collected. Examples of the findings have been liberally used throughout the narrative to illustrate the kinds of statistics that can result from data-analysis techniques that were used. It has also been pointed out that the primary limitation in the data is that they were obtained from 53 percent of the sample that could be contacted.

Nevertheless, various findings may be of interest to planners and continuing education leaders. Three illustrations of the use of the data for planning purposes were provided in a previous section. The reader is encouraged to make a thorough examination of each table of data. For example, the reader might be concerned about the low amount of instructional activity reported in home economics. (Actually none was reported; this may have been due to an inadequate sample size or that all persons in the sample presenting instruction in home economics chose not to complete the questionnaire.) The continuing educator who feels deeply about problems of human nutrition, family relationships and other problems addressed by home economists might be stimulated to expand the number of instructional offerings in these areas. Thus, implications for continuing education can be drawn for each and every statistic presented.

In summary, descriptive data were presented about (1) the number of instructional activities, (2) the number of instructor hours, and (3) the number of student hours involved in post-secondary education. In addition, these variables were analyzed in terms of (1) the type of objective addressed by the instructor, (2) the subject-matter involved, (3) the medium of communication, (4) the mode of instruction, and (5) the location of the instruction. Certain statistics were translated into estimates for the State. Demographic characteristics of the participants were identified. One portion of post-secondary education activity (non-credit instruction for adults 25 years of age and older) was separated out and analyzed in terms of the above variables.

What Was Discovered About Financing Continuing Education?

One of the initial purposes of the study was to obtain information about how continuing education is financed. Questions were asked in the questionnaire about the fee for each activity and who contributed to the direct and indirect costs. However, it became apparent to the research team that the area of financing continuing education required more sophisticated treatment than was possible through the survey. The information obtained from the questionnaire merely identified the obvious persons, groups, and institutions who paid the fees and tuition charged by the continuing education unit. Thus, it was recommended that a thorough study of the economics of post-secondary continuing education be conducted apart from the survey of instructional activities.

A Final Note

Neither time, nor schooling, nor impoverished circumstances seem to diminish the adult population's desire and need to learn. More and more, the educational institution is being asked to accommodate its offerings to the adult's life style.

Increasingly, the quality of human life will be directly related to the quality of learning opportunities available to adults. Planners and continuing education leaders can and must provide that quality component in adult education.

The state of the art in program development and long-range planning is just beginning to take shape. The interest of planners in improving their abilities to determine educational needs more effectively suggests an encouraging future for adult learners.

CHAPTER III

A SURVEY OF CONTINUING EDUCATION GOALS FOR DEGREE-GRANTING POST-SECONDARY INSTITUTIONS IN NEW YORK STATE[1]

Introduction

The role of the Board of Regents of the University of the State of New York is to insure that there is effective development and expansion of the total educational system in the State and that such a system meets established standards for quality. As part of this role, the Regents are in a unique position to effect an integrated, articulated system of education for all citizens throughout the State. In order to develop, maintain, and expand such a system, it is necessary to plan on a comprehensive, coordinated Statewide basis.

The purpose of the task reported here was to supply the New York State Education Department higher education planning personnel with a complete range of the perceptions of interested publics concerning growth and change for continuing education and extension activities in degree-granting post-secondary institutions in New York State.

To satisfy that task, we turned to a survey device called the Focus Delphi and developed by Stuart A. Sandow with Delayne Hudspeth for the

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[1] This chapter was written by Stuart A. Sandow. It is also available as a separate publication from the Educational Policy Research Center, Syracuse University Research Corporation, Syracuse, New York 13210.

New York State Education Department in 1970. It is a device that collects the perceptions of several interested populations about an array of goal statements and holds their several response groups separate for comparison over several reiterations.

Our sample included four interested publics: individuals who in some way are part of the informal influence structure that advises the New York State Education Department; deans and directors of continuing education programs in degree-granting institutions; faculty who instruct in those programs; and clients who buy service, both individually and in groups.

The entire project, of which this is only one part, is conceived of as being within Phase I of a two-part study. In this first phase, we were primarily concerned with demonstrating a tool that would help the State continually update the information in these areas. For that reason, the individuals selected for participation do not reflect a scientific sample but, rather, represent exemplars of people in groups interested in emerging policy for continuing education in New York State either as policy-makers, administrators, faculty, or clients. While the data are suggestive and the desire to draw policy conclusions from the data intriguing, the investigators cannot support any such use.

The data do demonstrate that, with the selection of a large and scientifically significant sample, the resultant data would be a most powerful body of information to inform the policy apparatus in the State.

The reader's attention is directed to: (1) the report of the process, (2) the designer's conclusions and observations, and (3) the analysis of the "non-data" prepared by Michael Folk as a demonstration of how the process and data could be analyzed if it were scientifically selected.

The Focus Delphi Process

The process employed is basically simple. Its purpose is to collect the several perceptions of goals selected by interested publics, hold them separate throughout the cycle of inquiries, and display the similarities and dissimilarities that exist when a goal is scrutinized from the view of the various interest actors in any given milieu--in this case, higher continuing education service in New York State.

The purpose of the exercise is to bring before the planner or decision-maker that array of perceptions which helps him make decisions about where to invest his limited resources of time and energy in order to best serve those for whom he is responsible. By disaggregating that information, it is assumed one can come to understand where contests of belief are irreconcilable as well as where there is mutual consent, where priorities are agreed to, and where they are opposed; how they are to be operationalized as seen by the several groups and by whom. In sum, it is a device to inform decision-makers. It does that by arraying belief about any proposed activity before the planner for his analysis and trying to structure such array systematically.

The display compels the planner to confront the question, "Whom will I be serving by carrying out this goal? The policy apparatus? The directors? The faculty? Or the students?" The procedure consists of three or four mailings to the invited participants. The results of each successive mailing (called "Rounds") are cumulated and reported back to the participants in the successive Rounds. For example, all the data from Rounds I and II are displayed to each person in Round III. The purpose of this reiteration is to, hopefully, influence their deliberations. It does not and is not intended to force consensus, which is one of the primary goals of the historic Delphi Process. Further, the Focus Delphi is not a forecasting device, but, rather, an information device about how people respond to various proposed goals when their personal involvement is implicit in the inquiry.

The Inquiry(s)

The complete materials for Rounds I, II, and III are included in Figures 1, 2, and 3, and should be read completely to understand the process. The materials are included in the narrative, beginning on page 116 and ending on page 144.

Round I: The invited participants were told who we were, what we were interested in doing, and why. They were invited to tell us the innovations and reforms they would like to see in the entire system of continuing education, however they saw it. Their ideas could be curricular or organizational. They were asked to rank them in terms of personal priority. (The Round I materials are presented in Figure 1.)

The responses were screened by the study staff for duplication of content. This resulted in 49 separate ideas which were then written in a standardized form as occurred realities.[1] The editing and rewriting tasks were undertaken in order to reduce the length of the questionnaire, to present each idea in the same format, and to equalize the "social appeal" of each goal item so that the idea, rather than the language, would be responded to by the participant in the study.

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[1] For a discussion of why goals were rewritten in the past tense, see "The Constraints of Language on Our Views of the Future," by Stuart A. Sandow, in The Potential of Educational Futures, edited by Michael Marien and Warren L. Ziegler (Worthington, Ohio: Charles A. Jones Publishing Co., 1972).

Fig. 1. Focus Delphi Round I Materials

SURC Educational Policy Research Center at Syracuse

RD 1 1/72 NYS
EPRC/SURC

INTRODUCTION

The Educational Policy Research Center and the Department of Adult Education of Syracuse University, at the request of the New York State Education Department, is conducting a project to ascertain the current and future goals of persons involved in continuing education activities at degree-granting institutions in this state. The four groups are policy-makers, administrators, faculty, and students.

The survey itself consists of 4 questionnaires which should require no more than 1 hour each to complete. We ask your help and offer you the possibility of influencing policy in this area of education, an opportunity to compare your ideas with other survey respondents prior to the second, third, and fourth rounds of questioning, and a copy of the final report.

In round one we are interested in your perceptions of two kinds of changes; REFORM and INNOVATION in each of two areas of concern; CURRICULA and ORGANIZATION. In your response to us, consider the reasonableness of your ideas but not the practicability or probability of its being adopted.

For example: Under CURRICULA we urge you to propose new subject areas, new instructional techniques, or media you believe reasonable and desirable (or a return to old ideas), without regard to your feelings about the idea's acceptability to others who may have conflicting interests.

DEFINITIONS

REFORM:	changes which you would like to see now within the existing educational system as you experience it in the present
INNOVATION:	possible changes in the educational system which you would like to see addressed now which might lead to future changes
CURRICULA:	the subject matter offered; the mode of instruction (e.g., lecture, seminar, independent study); standards of performance for students; standards for instructors; kinds of educational materials used, including new media; and the methods of evaluation
ORGANIZATION:	the administration of programs, scheduling procedures, registration procedures, financial arrangements, target groups, location, and similar matters.

INSTRUCTIONS

1. List:
    - 1 or 2 CURRICULA/REFORM ideas
    - 1 or 2 ORGANIZATIONAL/REFORM ideas
    - 1 or 2 CURRICULA/INNOVATION ideas
    - 1 or 2 ORGANIZATIONAL/INNOVATION ideas
2. Select:
    - from the REFORM IDEAS the top priority item
    - from the INNOVATION IDEAS the top priority item
3. Chose:
    - from those two items the TOP PRIORITY idea
4. SIGN the response form and mail postage free immediately

Thank you

SAMPLE RESPONSE FORM

(Please do not let our examples influence your response)

REFORM

CURRICULA REFORM

1. (more studies concerning urban problems)
2. (more use of audio-visual media)

ORGANIZATIONAL REFORM

3. (reduced requirements for entry into study)
4. (increased financial aid for non-credit study)

REFORM PRIORITY
(1 of the 4)
3

IDEA OF HIGHEST PRIORITY
(1 of the previous 2)
3

INNOVATION

CURRICULA INNOVATION

5. (citizen role in policy making)
6. (studies in ecology)

ORGANIZATIONAL INNOVATION

7. (citizen participation in the selection of education programs)
8. (citizen's with expertise permitted to set up classes using available facilities)

INNOVATION PRIORITY
(1 of the 4)
7

Response form RD1 NYS
EPRC/SURC
NAME ____________

PLEASE SIGN AND MAIL IMMEDIATELY

SPECIAL NOTE: Please remember to sign your name to the response form. While you will remain anonymous throughout the study, we have no way of knowing which group you are a member of without your name. It makes it impossible to include your responses to this important study. Thanks.

Fig. 1--Continuation

Fig. 1--Continuation

REFORM

CURRICULA REFORM

1. ______________________________

2 ______________________________

ORGANIZATIONAL REFORM

3. ______________________________

4. ______________________________

REFORM PRIORITY
(1 of the 4)

______

INNOVATION

CURRICULA INNOVATION

5. ______________________________

6. ______________________________

ORGANIZATIONAL INNOVATION

7. ______________________________

8. ______________________________

INNOVATION PRIORITY
(1 of the 4)

______

IDEA OF HIGHEST PRIORITY
(1 of the previous 2)

______

PLEASE SIGN AND MAIL IMMEDIATELY

Response form RD1 NYS
EPRC/SURC
NAME ______________________

Round II: We sent this list of goals to the participants and asked them to make three judgments about each goal: (See the Round II materials in Figure 2.)

Its effect on you personally

Its effect on continuing education generally

The group that would benefit most.

Our staff compiled the information received according to the four response groups and returned to the respondents a display of the several responses to each question for each group participating. (See the Round III materials in Figure 3.)

Round III: The participants were asked to focus on 20 events of the 49 that were in some way interesting to them. Having made that initial selection, they were asked to focus on just those 20 and indicate which of the participating groups they believed had the power to cause the event to occur, if each group chose to aggress for it. Then they were asked to select and rank the 10 events they believed to have the highest priority for them personally, and, finally, to indicate for each of those 10 events when they thought the goal could happen (i.e., in the short term, the medium term, or the long-term future).

Notes on the Process

This is the third time the process has been used. Each time we have modified it to suit the needs of the project. In this case, the following observations must be made to assist in any examination of the data that follow and to help those who would use this technique in the future.

In this study we elected to continue in the process everyone invited to participate, whether they took part or not. We wished to know whether people would get in or out, depending on the nature of each successive inquiry. We have no information from this study that tells us anything definitive.

The study was conducted in the busiest academic period--February through June--and our level of participation (about 20%) was greater than expected.

There is a tendency to forget what the numbers in the data represent. It is imperative that the size of a sub-group's sample be considered when making comparisons across groups.

While it is necessary to use numbers to display these impressions or feelings about goals, they in no way reflect what people want. They can inform our intuition and can help guide our thinking, but, in themselves, do not tell us what people will really want once they have access to these changes. This is a process of value only if it is continually updated and the priorities operationalized.

The Sample

A total of 445 individuals were invited to participate in the Focus Delphi. They were drawn from five[1] distinct groups of people. The five groups and their numerical makeups were:

Policy Advisor/Influence Structure		72
Deans and Directors		47
Faculty		210
Clients		116
Organizations	(47)	
Students	(69)	

Clients and students were grouped together as one group.

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[1] While the data for the study show only four groups, the researcher was interested in examining the differences that might exist between those individuals who purchased service from continuing education programs as individuals and those who came as members of organizing groups.

Fig. 2. Focus Delphi Round II Materials

SURC Educational Policy Research Center at Syracuse

March 27, 1972

Dear Friends,

Thank you for your prompt response to the first round of our inquiry. The number of you who responded was most gratifying. For those of you who were unable to respond by the deadline for round one we have continued you in the process and hope on the succeeding rounds you can participate.

All of the goal statements enclosed for your attention were drawn from your lists. We have taken the goals that appeared repeatedly, and/or could have a significant impact on continuing education activities in N.Y.S. The goals were rewritten to allow them to read in a consistent style, to read with a minimum of misinterpretation and to remove as much value weighting as possible.

INSTRUCTIONS

The purpose of this round is to elicit your several perceptions to three (3) questions about each goal. (Please take a moment and look at the response form enclosed).

1. The first question you are to address concerns the EFFECT ON YOU of each goal's occuring. That is, you are to assume that the goal in question will occur. What will be its effect on you personally? Use one of the following symbols to indicate your response:

++	High Positive Effect
+	Positive Effect
0	Little Effect, if any
–	Negative Effect (it will hurt me, but not much)
––	Extreme Negative Effect

2. Next, and irrespective of how the goal would affect you personally, address the EFFECT OF THE GOAL ON ALL POST-SECONDARY EDUCATION IN NEW YORK STATE. Again choose from the same symbols (++ to ––). Place your response in the appropriate column.

3. Finally, indicate which group listed below would BENEFIT THE MOST if this goal occurred. The groups and the corresponding symbol are:

0. No benefit to any specific group listed
1. The policy making apparatus of N.Y.S.
2. Administrators of Continuing Education Programs
3. Faculty in Continuing Education
4. Students of Continuing Education Programs
5. All of the above

Please indicate your response in the appropriate column using the appropriate number (0 5) to indicate your response.

4. If you feel a goal of great importance has not been adequately covered in those listed, please feel free to list it and make the three responses requested for the listed events. If possible, we will add these goals for the two remaining rounds.

Thank you for your participation. Please return this questionaire as soon as possible. We must have it no later than APRIL 14. Please remember to print your name so we can properly separate these responses. Thank you.

Sincerely,

Stuart A. Sandow

P.S. Please PRINT YOUR NAME. Thanks.

Fig. 2--Continuation

N.Y.S. Department of Education Planning Study

NAME ______________________

GOAL	EFFECT ON YOU (++, +, 0, -, --)	EFFECT ON POST SEC ED (++, +, 0, -, --)	BENEFICIARY (0, 1, 2, 3, 4, 5)
1. Monroe Community College has taken the lead in publishing a Dean's List for Evening Division students.			
2. The New York State Legislature has passed a bill to offer tax incentives to individuals who do not enroll in continuing education activities offered within the State, declaring an excessive number of underemployed degree holders.			
3. The N.Y.S. Regents has decided that all tenured positions will be reviewed every 8 years.			
4. All faculty in the N.Y.S. system of higher education must participate in at least 3 credits of instruction in their field every other year and at least three credits of instruction in a related area every other year.			
5. The Department of Education has announced the availability of 37,000 taped lectures available to any citizen through the public library system. The tapes are drawn from key lectures of faculty within the State University System.			
6. The Department of Education has initiated a central clearing house for all non-degree granting activities offered under its aegis anywhere in New York State. The number to call toll free is ______			
7. The Rockefeller Foundation has awarded a grant to the Department of Education to help underwrite 13 experimental evening care centers for the children of parents enrolled in night courses.			

Fig. 2--Continuation

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Fig. 2--Continuation

GOAL	EFFECT ON YOU (++, +, 0, -, --)	EFFECT ON POST SEC ED (++, +, 0, -, --)	BENEFICIARY (0, 1, 2, 3, 4, 5)
8. The Cornell University Extension school has completed preparations to offer 31 one credit courses in the evening division in specific areas ranging from town government to interior design and decorating.			
9. Funds have been made available by the State for three community colleges to expand their information and counseling services to include evening and part-time students.			
10. A number of community colleges have instituted a registration-by-mail system that includes both full and part-time programs.			
11. The State Education Department has published a set of performance criteria for the granting of degrees to evening students that is significant in its rigidity and toughness of standards.			
12. Courses are now being offered in all but two colleges in New York State in futures and forecasting. All are open to evening division students.			
13. The State University System has withdrawn support for 248 courses offered at its several campuses deemed less than adequate in course content to warrant credit from an academic institution. The courses may be offered at the discretion of faculty and only if more than 15 students enroll.			
14. The State Education Department has informed all administrative personnel that they must offer at least one course each calendar year.			
15. Through the New York State Chamber of Commerce a non-credit course is now available to residents of 14 communities detailing the functions and operations of all social services available to them in the community.			

Fig. 2--Continuation

GOAL	EFFECT ON YOU (++, +, 0, –, – –)	EFFECT ON POST SEC-ED (++, +, 0, –, – –)	BENEFICIARY (0, 1, 2, 3, 4, 5)
16. The Continuing Education Office at Syracuse University has announced that 41 of its courses are now available in more than one instructional mode. Students select their option at registration: lecture, videotape, audio cassette, or programmed instruction.			
17. Students attending any of the State University College campuses full or part-time may now apply for special degree programs the content of which is self selected and leads to a Bachelors of Assorted Arts/Sciences.			
18. The Alumni Associations of the big six private universities in New York State have begun a recruitment drive aimed at all graduates to invite them to return for continuing education activities. This drive is hoped to increase revenues and bolster community interest in the institutions.			
19. Ithaca College has initiated a placement center for its older part-time students. Other institutions are watching the program with interest.			
20. Cortland College, Ithaca College, Cornell University and Syracuse University have consolidated their Departments of Film and Television. The saving in equipment and the increased excellence of staff is seen as highly beneficial to all involved.			
21. The continuing education programs of all the institutions in the Albany area are now published in one catalog for use by area residents. Admission to each institutions programs is handled by one central office.			
22. Nassau Community College has announced that its facilities are available to any individual with special skills who is willing to teach them. The courses will be non-credit for the first year while the program is evaluated. Tuition will defer the costs incurred by curriculum specialists who will aid in the preparation of materials.			

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Fig. 2--Continuation

GOAL	EFFECT ON YOU (++, +, 0, −, −−)	EFFECT ON POST SEC-ED (++, +, 0, −, −−)	BENEFICIARY (0, 1, 2, 3, 4, 5)
23. The Ford Foundation has awarded a grant to CUNY to employ 15 Roving Lecturers who will offer courses at each of the City's colleges in the same semester.			
24. The Continuing Education Office at Cornell, with the assistance of the Telephone Company and the Chamber of Commerce, has compiled a "Blue Pages" listing the human resources of the city; ex-Peace Corps, Vista volunteers, retired experts, etc.			
25. The Administration of the Continuing Education Department at New York University has invited all students to make suggestions to it concerning policy and programs for next year's offerings.			
26. The Regents of the State of New York have asked colleges in each region of the State to plan their offerings cooperatively.			
27. Syracuse University has dissolved its All-University Board composed of students, faculty, administrators and staff. The announcement stated that decisions in the future would be made by those accountable and responsible.			
28. The State Education Department has invited spokesmen from industry and the professions to keep them informed of their needs to help plan their continuing education offerings.			
29. The State University at Albany is evaluating a proposal to decentralize its continuing education offerings and locating courses in mini-centers scattered throughout the city.			
30. Through a grant from the Justice Department the community colleges in the State University System are developing courses in crime control, crime motivation, and prevention, to be offered to the general public through continuing education.			

Fig. 2--Continuation

GOAL	EFFECT ON YOU (++, +, 0, –, ––)	EFFECT ON POST SEC-ED (++, +, 0, –, ––)	BENEFICIARY (0, 1, 2, 3, 4, 5)
31. The Empire State College program now includes 18 courses that are remedial in nature and offered for no credit.			
32. Hofstra University has instituted a Department of Suburban Affairs. Courses are open to both degree and non-degree seeking students.			
33. The State University has mandated a course in population and environment for all degree seeking students in the system.			
34. The University of Rochester has announced a new series of one-credit courses in its continuing education program that teach the fundamental concepts of each of 13 disciplines.			
35. The New York State Council on the Arts has offered to support the expansion of fine arts programs in continuing education departments of at least six schools this year. To be considered the institutions selected must demonstrate a willingness to take over the financial costs after one year.			
36. The City College of New York has announced a new course in governance open to the public. The course will be taught by a member of the City Council, the State Assembly, the State Legislature, and a staff person from both a Congressional and Senate office.			
37. At the urging of the Regents, libraries across the state are preparing non-credit courses in library science for the public.			
38. The State University Agriculture and Technical College at Morrisville has announced a policy that in effect gives more emphasis in grading on accomplishment than on course completion.			

Fig. 2--Continuation

GOAL	EFFECT ON YOU (++, +, 0, −, −−)	EFFECT ON POST SEC-ED (++, +, 0, −, −−)	BENEFICIARY (0, 1, 2, 3, 4, 5)
39. Students at New York University enrolled in non-credit remedial courses prior to formal admission are demanding credit for those courses.			
40. Yeshiva University is experimenting with a new internal management system that ignores differences between credit/non-credit, youth/adult, degree/non-degree offerings. Students apply after two years for a program appraisal and work out sliding credit for their studies.			
41. Continuing education programs at State University institutions are now following an open door policy for any courses offered under its aegis.			
42. In a hotly-contested policy statement the AAUP has come out in favor of modifying standards for appointments, to focus more heavily on expertise in a field rather than on credentials held, in choosing faculty appointments.			
43. The State has increased its financial support for students enrolled in health related programs.			
44 New York State is exploring a proposal that would have the effect of ending continuous learning through age 16. The proposal involves guaranteeing each resident fourteen years of free access to the public schools of the State that can be used throughout the individual's life.			
45. Following the Yale Model, Syracuse, and Cornell, and New York University have advised their students that tuition can be deferred at the University until after graduation to eliminate the need for student loans from commercial banking companies.			
46. The State-owned institutions now charge a tuition competitive with the private units in the state and the students receive vouchers to attend whatever school they wish.			

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GOAL	EFFECT ON YOU (++, +, 0, –, ––)	EFFECT ON POST SEC-ED (++, +, 0, –, ––)	BENEFICIARY (0, 1, 2, 3, 4, 5)
47. Part-time evening students are now eligible for the Federal student loan guarantee program.			
48. A bill is before the State Legislature to eliminate student tuition completely, for anyone full or part-time, with income below the Federal poverty level. In effect all students over 18 declaring themselves independent are thought to be eligible.			
49. The Middle States Accrediting Association has issued a policy statement to the effect that students and faculty involved in part-time or continuing education activities need not meet the same requirements as full-time degree seeking programs demand.			

Fig. 2--Continuation

Fig. 3. Focus Delphi Round III Materials

SURC Educational Policy Research Center at Syracuse

April 28, 1972

Dear Friends,

Thank you for your prompt response to the second round of our inquiry. The number of you participating continues to be most gratifying. For those of you unable to respond by the deadline we have continued you in the process and hope that you will participate in this, the last round. The most time consuming and difficult round is now behind us.

- The enclosed forms once again list the goals chosen from those you submitted in Round I.
- InRound II you addressed three (3) questions for each goal: EFFECT ON YOU, EFFECT ON SOCIETY, and BENEFICIARY.
- All your responses to those questions are displayed on the enclosed response form. They are there to aid you in your deliberations for this round.

EXPLANATION OF THE DATA

- To the immediate right of each goal statement is a column listing the numbers 1 – 4. These refer to the four participating groups:
    1. The relevant policy making apparatus of NYS
    2. Administrators/Deans of Continuing Education Programs
    3. Faculty in Continuing Education
    4. Students/Clients of Continuing Education Programs

NOTE: Please familiarize yourself with these numbers and groups.

- Column I (EFFECT ON YOU) displays the percentage of respondents from each group that felt the goal had a negative (–), neutral (0), or positive (+) effect for themselves.
- Column II (EFFECT ON SOCIETY) displays the percentage of respondents from each group that felt the goal had a negative (–), neutral (0), or positive (+) effect on society.
- Column III (BENEFICIARY) displays the percentage of respondents of each group and their respective estimates of who benefits.

NOTE: [NONE = No Single Group & 5 = All Groups Equally]

- Take a moment and examine the first goal statement and appropriate data.
- Familiarize yourself with the four categories of participants.
- BECAUSE OF THE LARGE AMOUNT OF DATA TO BE EXAMINED IN YOUR DELIBERATIONS YOU ARE TO RESPOND IN THIS ROUND TO ONLY TWENTY (20) ITEMS OF MOST INTEREST TO YOU. (most familiar with, interested in, opposed to, etc.) YOU ARE TO DEAL ONLY WITH THOSE TWENTY EVENTS. Please read through the 49 events and make your selection now.

INSTRUCTIONS

The purpose of this final round is to elicit your thoughts about three (3) questions for each of the TWENTY (20) goals you selected.

1. In column IV (PERCEPTION OF POWER) you are asked to indicate which of the groups listed (choose only one) has the power to cause the goal to occur if they choose to. Please use the numbers assigned to each group (1–4 or 0, if no single group.)

2. In Column V (PRIORITY) select from the TWENTY GOALS you chose to deal with the ten most important to you and rank them in order of their priority for action. (1–10, one [I] would be the highest priority item)

3. In Column VI (TIME FRAME), based on all the data and your perceptions of power and relative priority, indicate when you think these goals can or should occur. Please use the following code:

SHORT TERM (ST)	Within 18 months
MEDIUM TERM (MT)	Between 18 months and 3 years
LONG TERM (LT)	Later

Finally, thank you again for your participation. You have been most helpful. As soon as we have compiled the data and written our report, you will receive a copy for yourself. WE WILL BE SENDING COPIES OF THE REPORT ONLY TO THOSE OF YOU WHO PARTICIPATE IN THE LAST ROUND, so please take the time now to respond.

WE MUST RECEIVE YOUR RESPONSES NO LATER THAN MAY 19. PLEASE PRINT YOUR NAME SO WE CAN PROPERLY SEPARATE THE RESPONSES. THANK YOU.

Stuart A. Sandow

P.S. PLEASE PRINT YOUR NAME. Thanks

Fig. 3--Continuation

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SELECT TWENTY (20) EVENTS FIRST

NAME ____________________

GOAL	GROUP NO.	I EFFECT ON YOU			II EFFECT ON POST SEC ED			III BENEFICIARY						IV PERC OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST–MT–LT)
		−	0	+	−	0	+	NONE	1	2	3	4	5			
1. Monroe Community College has taken the lead in publishing a Dean's List for Evening Division students.	1	0	100	0	0	58	42	31	0	0	0	69	0			
	2	0	73	27	0	64	36	27	0	9	0	36	27			
	3	0	93	7	0	37	63	23	0	13	6	45	13			
	4	6	80	14	3	43	54	23	0	3	0	60	14			
2. The New York State Legislature has passed a bill to offer tax incentives to individuals who do not enroll in continuing education activities offered within the State, declaring an excessive number of underemployed degree holders.	1	42	42	17	100	0	0	71	0	14	7	0	7			
	2	64	27	9	82	9	9	42	25	8	8	17	0			
	3	53	40	7	77	10	13	61	18	7	0	7	7			
	4	59	26	15	91	3	6	80	6	3	0	6	6			
3. The N.Y.S. Regents has decided that all tenured positions will be reviewed every 8 years.	1	9	73	18	9	27	64	33	0	0	8	17	42			
	2	0	36	64	9	27	64	17	0	17	0	33	33			
	3	10	53	37	13	13	73	6	6	13	6	32	35			
	4	6	46	49	6	17	77	14	5	14	5	35	27			
4. All faculty in the N.Y.S. system of higher education must participate in at least 3 credits of instruction in their field every other year and at least three credits of instruction in a related area every other year.	1	25	33	42	25	0	75	14	7	0	14	29	36			
	2	9	64	27	27	9	64	0	8	25	17	33	17			
	3	14	52	34	17	21	62	14	0	4	21	29	32			
	4	3	31	66	6	9	86	3	0	0	29	34	34			
5. The Department of Education has announced the availability of 37,000 taped lectures available to any citizen through the public library system. The tapes are drawn from key lectures of faculty within the State University System.	1	8	17	75	8	8	83	15	0	0	0	46	38			
	2	0	36	64	0	0	100	0	0	0	23	77	0			
	3	0	50	50	7	10	83	10	0	0	10	48	31			
	4	0	29	71	6	9	86	5	8	3	5	47	32			

Fig. 3--Continuation

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GOAL	GROUP NO.	I EFFECT ON YOU			II EFFECT ON POST SEC ED			III BENEFICIARY						IV PERC OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST–MT–LT)
		−	0	+	−	0	+	NONE	1	2	3	4	5			
6. The Department of Education has initiated a central clearing house for all non-degree granting activities offered under its aegis anywhere in New York State. The number to call toll free is	1	0	33	67	0	8	92	13	0	7	7	33	40			
	2	0	45	55	0	9	91	17	0	8	8	50	17			
	3	10	53	37	10	17	73	17	0	17	7	33	27			
	4	0	50	50	0	29	71	18	15	9	0	32	26			
7. The Rockefeller Foundation has awarded a grant to the Department of Education to help underwrite 13 experimental evening care centers for the children of parents enrolled in night courses.	1	0	75	25	0	8	92	13	0	7	7	60	13			
	2	0	45	55	0	9	91	0	0	13	20	67	0			
	3	10	73	17	7	3	90	7	3	3	13	63	10			
	4	3	69	29	0	17	83	3	0	3	5	82	8			
8. The Cornell University Extension school has completed preparations to offer 31 one credit courses in the evening division in specific areas ranging from town government to interior design and decorating.	1	0	67	33	8	33	58	15	0	0	0	69	15			
	2	18	82	0	0	45	55	27	9	0	0	64	0			
	3	0	90	10	0	17	83	16	0	3	6	65	10			
	4	0	43	57	3	9	89	3	0	3	6	75	14			
9. Funds have been made available by the State for three community colleges to expand their information and counseling services to include evening and part-time students.	1	0	83	17	0	25	75	15	0	0	8	54	23			
	2	0	64	36	0	9	91	15	0	8	8	62	8			
	3	0	80	20	0	17	83	3	3	10	6	58	19			
	4	0	54	46	0	0	100	0	0	5	3	81	11			
10. A number of community colleges have instituted a registration-by-mail system that includes both full and part-time programs.	1	0	92	8	0	25	75	7	0	13	7	60	13			
	2	0	55	45	0	9	91	0	0	25	0	50	25			
	3	0	77	23	0	7	93	3	0	23	3	52	19			
	4	3	57	40	6	0	94	2	2	17	5	49	24			

Fig. 3--Continuation

GOAL	GROUP NO	I EFFECT ON YOU −	I 0	I +	II EFFECT ON POST SEC-ED −	II 0	II +	III BENEFICIARY NONE	III 1	III 2	III 3	III 4	III 5	IV PERC OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST–MT–LT)
11. The State Education Department has published a set of performance criteria for the granting of degrees to evening students that is significant in its rigidity and toughness of standards.	1	17	25	58	42	8	50	58	0	0	0	8	33			
	2	55	27	18	73	9	18	42	0	8	17	33	0			
	3	7	60	33	13	3	83	7	3	0	3	41	45			
	4	14	46	40	26	9	66	22	8	11	8	14	36			
12. Courses are now being offered in all but two colleges in New York State in futures and forecasting. All are open to evening division students.	1	0	58	42	0	42	58	31	0	0	8	46	15			
	2	0	73	27	0	36	64	45	0	0	0	55	0			
	3	0	89	11	4	62	35	58	0	0	4	33	4			
	4	9	64	27	9	24	67	25	0	0	0	63	13			
13. The State University System has withdrawn support for 248 courses offered at its several campuses deemed less than adequate in course content to warrant credit from an academic institution. The courses may be offered at the discretion of faculty and only if more than 15 students enroll.	1	17	42	42	33	8	58	36	14	7	0	21	21			
	2	18	64	18	45	9	45	36	18	0	0	27	18			
	3	0	79	21	7	28	66	21	11	14	7	21	25			
	4	9	74	17	17	20	63	14	11	11	14	31	17			
14. The State Education Department has informed all administrative personnel that they must offer at least one course each calendar year.	1	40	30	30	40	20	40	33	8	25	8	8	17			
	2	36	27	36	36	36	27	33	17	25	0	8	17			
	3	14	64	21	21	25	54	43	7	18	0	18	14			
	4	6	71	23	14	26	60	26	8	15	15	15	21			
15. Through the New York State Chamber of Commerce a non-credit course is now available to residents of 14 communities detailing the functions and operations of all social services available to them in the community.	1	0	58	42	0	25	75	23	0	0	0	54	23			
	2	0	50	50	0	30	70	30	0	0	0	50	20			
	3	0	73	27	0	27	73	13	3	7	0	53	23			
	4	0	49	51	6	23	71	24	3	3	5	32	32			

Fig. 3--Continuation

GOAL	GROUP NO.	I EFFECT ON YOU −	I 0	I +	II EFFECT ON POST SEC·ED −	II 0	II +	III BENEFICIARY NONE	III 1	III 2	III 3	III 4	III 5	IV PERC OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST–MT–LT)
16. The Continuing Education Office at Syracuse University has announced that 41 of its courses are now available in more than one instructional mode. Students select their option at registration: lecture, videotape, audio cassette, or programmed instruction.	1	0	73	27	0	18	82	15	0	0	8	38	38			
	2	0	45	55	0	9	91	8	0	8	8	62	15			
	3	0	70	30	13	13	73	11	0	14	14	43	17			
	4	0	69	31	6	3	91	6	0	0	6	51	37			
17. Students attending any of the State University College campuses full or part-time may now apply for special degree programs the content of which is self selected and leads to a Bachelors of Assorted Arts/Sciences.	1	18	55	27	20	10	70	36	0	0	0	55	9			
	2	18	45	36	18	9	73	18	0	0	0	45	36			
	3	7	73	20	30	10	60	20	3	3	3	50	20			
	4	6	46	49	20	3	77	17	3	6	0	57	17			
18. The Alumni Associations of the big six private universities in New York State have begun a recruitment drive aimed at all graduates to invite them to return for continuing education activities. This drive is hoped to increase revenues and bolster community interest in the institutions.	1	0	50	50	10	10	80	18	0	9	0	18	55			
	2	9	45	45	9	0	91	9	9	9	0	18	55			
	3	7	50	43	7	23	70	16	0	26	10	16	32			
	4	3	77	20	9	17	74	17	6	25	6	19	28			
19. Ithaca College has initiated a placement center for its older part-time students. Other institutions are watching the program with interest.	1	0	73	27	0	18	82	19	6	6	6	50	13			
	2	0	55	45	0	27	73	18	0	0	0	55	27			
	3	0	80	20	0	17	83	7	0	3	0	72	17			
	4	0	54	46	0	3	97	3	0	6	0	80	11			
20. Cortland College, Ithaca College, Cornell University, and Syracuse University have consolidated their Departments of Film and Television. The saving in equipment and the increased excellence of staff is seen as highly beneficial to all involved.	1	9	45	45	0	9	91	8	17	17	0	0	[illegible]			
	2	0	64	36	0	9	91	0	15	8	8	31	38			
	3	0	87	13	0	17	83	9	3	30	9	15	33			
	4	0	74	26	0	11	89	11	0	22	8	19	39			

Fig. 3--Continuation

GOAL	GROUP NO.	I EFFECT ON YOU −	I EFFECT ON YOU 0	I EFFECT ON YOU +	II EFFECT ON POST SEC-ED −	II EFFECT ON POST SEC-ED 0	II EFFECT ON POST SEC-ED +	III BENEFICIARY NONE	III BENEFICIARY 1	III BENEFICIARY 2	III BENEFICIARY 3	III BENEFICIARY 4	III BENEFICIARY 5	IV PERC. OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST–MT–LT)
21. The continuing education programs of all the institutions in the Albany area are now published in one catalog for use by area residents. Admission to each institutions programs is handled by one central office.	1	9	45	45	0	18	82	25	0	0	0	33	42			
	2	9	45	45	9	0	91	0	9	0	0	27	64			
	3	7	73	20	7	10	83	6	0	28	3	38	25			
	4	0	74	26	9	11	80	3	13	21	5	36	23			
22. Nassau Community College has announced that its facilities are available to any individual with special skills who is willing to teach them. The courses will be non-credit for the first year while the program is evaluated. Tuition will defer the costs incurred by curriculum specialists who will aid in the preparation of materials.	1	9	64	27	9	0	91	17	0	8	8	50	17			
	2	0	64	36	9	9	82	36	0	9	9	18	27			
	3	7	72	21	7	14	79	13	0	6	16	48	16			
	4	0	74	26	11	11	77	16	3	5	18	39	18			
23. The Ford Foundation has awarded a grant to CUNY to employ 15 Roving Lecturers who will offer courses at each of the City's colleges in the same semester.	1	0	83	17	0	50	50	21	7	7	0	50	14			
	2	9	82	9	9	36	55	36	9	0	9	36	9			
	3	3	90	7	3	24	72	16	0	10	13	48	13			
	4	0	71	29	3	14	83	13	3	5	13	45	21			
24. The Continuing Education Office at Cornell, with the assistance of the Telephone Company and the Chamber of Commerce, has compiled a "Blue Pages" listing the human resources of the city; ex-Peace Corps, Vista volunteers, retired experts, etc.	1	0	50	50	0	25	75	21	7	21	0	7	43			
	2	0	64	36	0	27	73	33	17	2[illegible]	0	8	17			
	3	0	76	24	0	41	59	36	4	[illegible]	4	18	36			
	4	0	69	31	0	37	63	33	0	8	3	11	44			
25. The Administration of the Continuing Education Department at New York University has invited all students to make suggestions to it concerning policy and programs for next year's offerings.	1	0	67	33	0	8	92	7	7	14	0	36	36			
	2	0	64	36	0	18	82	18	0	9	0	45	27			
	3	0	72	28	3	38	59	20	7	7	7	37	23			
	4	0	71	29	6	3	91	7	10	20	7	24	32			

Fig. 3--Continuation

GOAL	GROUP NO.	EFFECT ON YOU			II EFFECT ON POST SEC-ED			III BENEFICIARY						IV PERC. OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST—MT—LT)
		—	0	+	—	0	+	NONE	1	2	3	4	5			
26. The Regents of the State of New York have asked colleges in each region of the State to plan their offerings cooperatively.	1	0	25	75	8	8	83	18	0	9	0	0	73			
	2	9	18	73	0	0	100	0	10	20	0	0	70			
	3	14	48	38	17	10	72	14	7	11	4	18	46			
	4	0	43	57	3	17	80	19	11	19	0	16	35			
27. Syracuse University has dissolved its All University Board composed of students, faculty, administrators and staff. The announcement stated that decisions in the future would be made by those accountable and responsible.	1	0	82	18	36	9	55	31	8	15	8	0	38			
	2	18	73	9	36	27	36	45	0	9	0	9	36			
	3	11	68	21	32	29	39	31	8	19	8	4	31			
	4	15	85	0	50	35	15	59	9	21	0	3	9			
28. The State Education Department has invited spokesmen from industry and the professions to keep them informed of their needs to help plan their continuing education offerings.	1	0	17	83	0	17	83	14	21	0	0	7	57			
	2	0	18	82	0	9	91	0	18	0	0	9	73			
	3	0	31	69	0	7	93	0	10	17	0	24	48			
	4	0	40	60	0	0	100	0	8	8	3	25	56			
29. The State University at Albany is evaluating a proposal to decentralize its continuing education offerings and locating courses in mini centers scattered throughout the City.	1	0	64	36	18	27	55	36	0	0	0	36	27			
	2	9	64	27	27	0	73	17	0	0	17	42	25			
	3	11	75	14	11	22	67	32	0	8	4	40	16			
	4	6	74	20	20	20	60	29	0	6	0	51	14			
30. Through a grant from the Justice Department the community colleges in the State University System are developing courses in crime control, crime motivation, and prevention, to be offered to the general public through continuing education.	1	0	58	42	0	33	67	21	14	0	0	43	21			
	2	9	36	55	9	0	91	0	0	8	8	62	23			
	3	0	62	38	0	34	66	23	0	4	0	35	38			
	4	0	49	51	3	23	74	20	6	0	0	26	49			

Fig. 3--Continuation

GOAL	GROUP NO.	I EFFECT ON YOU −	I EFFECT ON YOU 0	I EFFECT ON YOU +	II EFFECT ON POST SEC-ED −	II EFFECT ON POST SEC-ED 0	II EFFECT ON POST SEC-ED +	III BENEFICIARY NONE	III BENEFICIARY 1	III BENEFICIARY 2	III BENEFICIARY 3	III BENEFICIARY 4	III BENEFICIARY 5	IV PERC. OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST–MT–LT)
The Empire State College program now includes ourses that are remedial in nature and offered no credit.	1	17	58	25	8	8	83	23	0	0	0	54	23			
	2	9	64	27	9	27	64	18	9	0	0	64	9			
	3	0	90	10	0	20	80	18	0	0	4	71	7			
	4	0	86	14	3	17	80	19	3	0	6	56	17			
Hofstra University has instituted a Department uburban Affairs. Courses are open to both ee and non-degree seeking students.	1	0	82	18	9	9	82	25	0	0	0	50	25			
	2	0	82	18	0	45	55	36	0	0	0	45	18			
	3	0	93	7	0	27	73	13	0	0	10	63	13			
	4	0	74	26	3	26	71	15	0	0	0	76	9			
The State University has mandated a course in ılation and environment for all degree-seeking ents in the system.	1	27	55	18	40	20	40	45	9	0	0	36	9			
	2	18	64	18	45	27	27	45	9	0	0	9	36			
	3	7	59	34	10	24	66	30	4	0	0	30	37			
	4	6	46	49	11	17	71	17	3	0	6	49	26			
The University of Rochester has announced a series of one-credit courses in its continuing cation program that teach the fundamental con- ts of each of 13 disciplines.	1	0	83	17	0	33	67	31	0	0	0	54	15			
	2	9	64	27	18	9	73	9	0	0	9	64	18			
	3	3	83	13	7	21	72	29	0	0	4	57	11			
	4	0	85	15	3	38	59	30	0	0	0	52	18			
. The New York State Council on the Arts has fered to support the expansion of fine arts ograms in continuing education departments of least six schools this year. To be considered institutions selected must demonstrate a llingness to take over the financial costs after year.	1	8	67	25	8	42	50	46	0	0	0	23	31			
	2	9	45	45	18	18	64	9	9	9	0	36	36			
	3	0	70	30	0	23	77	16	0	9	6	38	31			
	4	6	54	40	9	17	74	11	6	6	0	54	23			

Fig. 3--Continuation

GOAL	GROUP NO.	EFFECT ON YOU −	0	+	II EFFECT ON POST SEC-ED −	0	+	III BENEFICIARY NONE	1	2	3	4	5	IV PERC. OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST–MT–LT)
. The City College of New York has announced a w course in governance open to the public. The urse will be taught by a member of the City uncil, the State Assembly, the State Legislature, d a staff person from both a Congressional and nate office.	1	0	100	0	8	42	50	38	0	0	0	46	15			
	2	0	82	18	9	27	64	27	9	0	0	45	18			
	3	3	87	10	3	27	70	20	0	0	10	33	37			
	4	3	66	31	3	12	85	6	6	3	0	56	29			
. At the urging of the Regents, libraries across e state are preparing non-credit courses in brary science for the public.	1	8	75	17	8	42	50	54	0	0	0	38	8			
	2	9	45	45	9	27	64	27	0	0	0	36	36			
	3	7	67	27	7	27	67	21	3	0	0	45	31			
	4	0	54	46	0	23	77	29	0	6	0	34	31			
. The State University Agriculture and Technical llege at Morrisville has announced a policy that effect gives more emphasis in grading on complishment than on course completion.	1	0	83	17	25	8	67	38	0	0	0	54	8			
	2	9	64	27	18	36	45	45	0	0	9	18	27			
	3	4	71	25	19	11	70	19	0	0	4	52	26			
	4	3	63	34	21	6	74	21	0	6	9	50	15			
). Students at New York University enrolled in on-credit remedial courses prior to formal imission are demanding credit for those courses.	1	33	58	8	75	8	17	69	8	0	0	23	0			
	2	10	80	10	70	20	10	78	0	0	0	11	11			
	3	27	70	3	80	7	13	65	0	3	6	26	0			
	4	17	80	3	77	17	6	73	0	0	0	27	0			
). Yeshiva University is experimenting with a w internal management system that ignores fferences between credit/non-credit, youth/adult, gree/non-degree offerings. Students apply after o years for a program appraisal and work out iding credit for their studies.	1	17	50	33	0	0	100	8	0	0	0	62	31			
	2	0	70	30	30	10	60	27	9	0	9	18	36			
	3	14	76	10	32	18	50	36	0	7	4	36	18			
	4	3	82	15	32	12	56	33	0	6	3	45	12			

Fig. 3--Continuation

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GOAL	GROUP NO.	I EFFECT ON YOU			II EFFECT ON POST SEC-ED			III BENEFICIARY						IV PERC OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST–MT–LT)
		−	0	+	−	0	+	NONE	1	2	3	4	5			
41. Continuing education programs at State University institutions are now following an open door policy for any courses offered under its aegis.	1	17	42	42	0	8	92	15	0	0	0	54	31			
	2	10	50	40	20	0	80	20	10	0	0	20	50			
	3	23	60	17	33	17	50	43	0	0	0	46	11			
	4	3	47	50	26	15	59	27	3	6	6	48	9			
42. In a hotly-contested policy statement the AAUP has come out in favor of modifying standards for appointments, to focus more heavily on expertise in a field rather than on credentials held, in choosing faculty appointments.	1	0	42	58	9	9	82	23	0	0	8	46	23			
	2	0	33	67	11	0	89	11	0	0	33	22	33			
	3	0	47	53	3	14	83	10	0	0	27	20	43			
	4	6	46	49	14	3	83	11	0	0	25	42	22			
43. The State has increased its financial support for students enrolled in health related programs.	1	8	50	42	0	17	83	14	7	0	0	43	36			
	2	0	40	60	0	20	[illegible]	10	10	0	0	60	20			
	3	3	57	40	7	24	69	0	3	7	3	48	38			
	4	0	74	26	3	20	77	14	3	0	0	60	23			
44. New York State is exploring a proposal that would have the effect of ending continuous learning through age 16. The proposal involves guaranteeing each resident fourteen years of free access to the public schools of the State that can be used throughout the individual's life.	1	8	33	58	8	8	83	23	0	0	0	23	54			
	2	0	10	90	10	0	90	0	0	0	0	30	70			
	3	10	59	31	28	14	59	29	0	0	7	21	43			
	4	17	69	14	51	11	37	53	6	3	0	24	15			
45. Following the Yale Model, Syracuse, and Cornell, and New York University have advised their students that tuition can be deferred at the University until after graduation to eliminate the need for student loans from commercial banking companies.	1	8	83	8	0	25	75	15	0	0	0	54	31			
	2	10	50	40	20	10	70	10	10	0	0	50	30			
	3	0	60	40	0	7	93	4	0	0	0	64	32			
	4	9	57	34	20	3	77	9	0	0	0	74	18			

Fig. 3--Continuation

GOAL	GROUP NO.	I EFFECT ON YOU			II EFFECT ON POST SEC-ED			III BENEFICIARY						IV PERC OF POWER	V PRIORITIES FOR ACTION	VI TIME FRAME (ST–MT–LT)
		—	0	+	—	0	+	NONE	1	2	3	4	5			
. The State-owned institutions now charge a ition competitive with the private units in the ate and the students receive vouchers to attend atever school they wish.	1	17	50	33	33	0	67	23	8	8	0	31	31			
	2	30	0	70	20	0	80	20	10	0	0	20	50			
	3	23	33	43	27	7	67	22	0	0	0	48	30			
	4	14	66	20	38	15	47	26	9	6	0	41	18			
. Part-time evening students are now eligible r the Federal student loan guarantee program.	1	0	58	42	0	0	100	7	7	0	0	50	36			
	2	0	9	91	0	9	91	0	0	0	0	64	36			
	3	3	63	33	3	0	97	4	0	0	0	82	14			
	4	0	50	50	0	6	94	0	0	0	0	79	21			
8. A bill is before the State Legislature to liminate student tuition completely, for anyone ull or part-time, with income below the Federal overty level. In effect all students over 18 eclaring themselves independent are thought to e eligible.	1	42	25	33	25	0	75	23	8	0	0	46	23			
	2	18	18	64	18	9	73	9	0	0	0	55	36			
	3	23	57	20	37	0	63	23	0	3	3	60	10			
	4	26	57	17	57	3	40	35	6	0	0	50	9			
9. The Middle States Accrediting Association has ssued a policy statement to the effect that tudents and faculty involved in part-time or ontinuing education activities need not meet the ame requirements as full-time degree seeking rograms demand.	1	33	42	25	58	0	42	54	0	0	0	38	8			
	2	40	10	50	60	0	40	40	0	10	0	10	40			
	3	37	50	13	67	10	23	42	3	3	10	19	23			
	4	26	40	34	60	6	34	42	3	6	11	28	11			

Fig. 3--Continuation

Group I: Policy Advisors--Drawn from lists of various State advisory councils, State legislators on education-related committees, officials of the State Education Department, and members of the advisory council for this study.

Group II: Deans and Directors--For the purposes of the entire project, of which this is only one part, a sample of 46 institutions was selected from all the post-secondary degree-granting institutions in New York State. The individuals responsible for continuing and extension programs at those institutions were invited. In one institution, two individuals were invited to participate, making a total of 47 participants.

Group III: Faculty--Again for the purposes of the greater project, a sample of the faculty of those 46 institutions was selected without reference to their participation in continuing education activities. From that master list, every fifth name was selected as the sample for this study. This procedure resulted in a total of 210 individuals who were invited to participate.

Group IV: Clients/Students--The clients were defined as those organized groups who had purchased educational services from, or utilized the resources of, degree-granting institutions for the gain of their membership during the past year. With the aid of Chambers of Commerce from around the State, lists of organizations were culled and 400 separate organizations were queried to determine if they met those criteria. Forty-seven separate client organizations were identified and agreed to participate.

The individual students were selected by personally contacting faculty in the study and asking them to invite any student who would participate to contact us. Sixty-nine individual students did so.

Data on levels of participation for the respondent categories are presented in Tables 50 and 51. Three features might be noted: (1) 127 of the total sample of 445 responded at one time or other (26%); (2) 36 of the total sample consistently responded to all three Rounds (9%); and (3) the individual students were the best respondents--both in terms of their response rate on each of the three Rounds, and as the core group responding to all three Rounds. The typical reasons given for not participating for all Rounds are given in Table 52.

Goals Examined in the Study

The reader may wish to read through the list of goals examined in the study. They were presented earlier in Figure 2, pages 122 to 131. The reader is also encouraged, for any goal that interests him, to make the same kind of examination of the data pertaining to that goal that has been indicated in the example in the following sections.

Exploring the Data Displayed

Included here is a demonstration of Policy Analysis with the Focus Delphi Data. To help the reader make use of the tables, we have underlined all the relevant data on each chart for goal number 44 which is used as an example in the demonstration.

Note: The reader is also directed to pages 132-144 (Figure 3) for a display of the data for the following inquiries:

The effect of the goal on the respondent

The effect of the goal on Post-Secondary Education

The perceptions of the respondent as to who benefits.

Please read the Purpose, Examples, and Comments referring to each table in order. You will see the kind of inquiries that you might make about any goal listed.

TABLE 50

LEVELS OF PARTICIPATION OF RESPONDENTS

Group	Number Sent	Usable Responses	% Usable	Responded But Did Not Participate
I. Tabulation of Responses from Round I:				
Policy-Influence	72	9	13%	6
Faculty/Staff	210	23	11%	4
Deans and Directors	47	13	28%	0
Client Organizations	45	10	22%	7
Individual Students	61	24	39%	1
Unknowns/anonymous	-	10	-	5
	435	89	20%	23
II. Tabulation of Responses from Round II:				
Policy-Influence	72	12	17%	1
Faculty/Staff	210	29	14%	2
Deans and Directors	47	11	23%	0
Client Organizations	47[a]	10	21%	0
Individual Students	69[a]	27	39%	0
Unknowns/anonymous	-	3	-	1
	445[a]	92	21%	4
III. Tabulation of Responses from Round III:				
Policy-Influence	72	10	14%	1
Faculty/Staff	210	23	11%	4
Deans and Directors	47	10	21%	0
Client Organizations	47	9	17%	1
Individual Students	69	21	32%	0
Unknowns/anonymous	-	3	-	2
	445	76	17%	8

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[a] The differential between the number of participants in Rounds I and II is a result of the addition of 8 individual students and 2 representatives of client organizations.

TABLE 51

RESPONSE RATE DIFFERENTIAL BY GROUP FOR ALL ROUNDS

A. Faculty/Staff:

Number of separate individuals responding:	41
Number responding to all three Rounds:	9
Number responding to Rounds I, II only:	2
Number responding to Rounds I, III only:	4
Number responding to Rounds II, III only:	7
Number responding to Round I only:	9
Number responding to Round II only:	8
Number responding to Round III only:	2

B. Individual Students:

Number of separate individuals responding:	33
Number responding to all three Rounds:	12
Number responding to Rounds I, II only:	6
Number responding to Rounds, I, III only:	4
Number responding to Rounds II, III only:	4
Number responding to Round I only:	4
Number responding to Round II only:	2
Number responding to Round III only:	1

C. Client Organizations:

Number of separate individuals responding:	16
Number responding to all three Rounds:	5
Number responding to Rounds I, II only:	1
Number responding to Rounds I, III only:	0
Number responding to Rounds II, III only:	3
Number responding to Round I only:	5
Number responding to Round II only:	1
Number responding to Round III only:	1

D. Deans and Directors:

Number of separate individuals responding:	19
Number responding to all three Rounds:	6
Number responding to Rounds I, II only:	2
Number responding to Rounds I, III only:	2
Number responding to Rounds II, III only:	2
Number responding to Round I only:	4
Number responding to Round II only:	1
Number responding to Round III only:	2

TABLE 51--Continuation

E. Policy-Influencers:

Number of separate individuals responding:	18
Number responding to all three Rounds:	4
Number responding to Rounds I, II only:	1
Number responding to Rounds I, III only:	0
Number responding to Rounds II, III only:	3
Number responding to Round I only:	4
Number responding to Round II only:	4
Number responding to Round III only:	2

F. Composite Profile of Responses:

Number of separate individuals responding:	127
Number responding to all three Rounds:	36
Number responding to Rounds I, II only:	12
Number responding to Rounds I, III only:	10
Number responding to Rounds II, III only:	19
Number responding to Round I only:	26
Number responding to Round II only:	16
Number responding to Round III only:	8

TABLE 52

TYPICAL REASONS GIVEN FOR NOT PARTICIPATING FOR ALL ROUNDS

Policy-Influence Group:

1. Did not have time or staff to participate
2. Were not involved in continuing education

Faculty/Staff:

1. Not involved in continuing education
2. Never filled out questionnaires as a personal policy

Deans and Directors:

1. Not involved in continuing education

Representatives of Client Organizations:

1. Not involved in continuing education activities
2. Questionnaire too difficult to understand

Individual Students:

1. Did not understand the questionnaire

The analysis that follows should help you master the potential of the data display.

A Demonstration of Policy Analysis With The Focus Delphi Data

To aid the reader in understanding both the Focus Delphi Process and the use and analysis of the data displayed, we have prepared this analysis of one goal of interest to the researchers and underlined the appropriate data in the tables that follow. It is suggested that a similar examination be conducted for any event of interest to the reader to more clearly understand the implicationsof the data. Again, we caution the reader that the data are not drawn from a scientifically-selected sample and cannot be generalized beyond the sample itself.

We have chosen Goal Number 44 for our examination:

Number 44. "New York State is exploring a proposal that would have the effect of ending continuous learning through age 16. The proposal involves guaranteeing each resident fourteen years of free access to the public schools of the State that can be used throughout the individual's life."

1. **Data:** We turn to Figure 3 (page 143) where the data from Round II are displayed. For your convenience, we have here reproduced that data:

GOAL	GROUP NO.	I EFFECT ON YOU			II EFFECT ON POST SEC-ED			III BENEFICIARY					
		−	0	+	−	0	+	NONE	1	2	3	4	5
44. New York State is exploring a proposal that would have the effect of ending continuous learning through age 16. The proposal involves guaranteeing each resident fourteen years of free access to the public schools of the state that can be used throughout the individuals life.	1	8	33	58	8	8	83	23	0	0	0	23	54
	2	0	10	90	10	0	90	0	0	0	0	30	70
	3	10	59	31	28	14	59	29	0	0	7	21	43
	4	17	69	14	51	11	37	53	6	3	0	24	15

Here we note that the majority of Group 1 (Policy Advisory personnel) and of Group 2 (Deans and Directors of Continuing Education programs) see a high positive effect on themselves if it occurred, while Group 3 (Faculty) and Group 4 (Students) in the majority of cases, see no effect on themselves.

__Inquiry__: Why does the student population sampled in this study not realize the implications of such a change on their own situation? The faculty also seem to have ignored the implications of such a change on teaching strategies necessary for random populations not linked as age cohorts. Why? In this instance, the Deans and Directors seem to be clear about the change making an effect for the good but none of them could possibly qualify to take advantage of the change personally as students.

2. __Data__: We examine the perceptions of effect on post-secondary education in New York State. Here we note that a much higher percentage of the Policy group see the goal as having positive effects. The Deans and Directors persist in their assessment. The Faculty see the effect on the system as beneficial but the majority of the Students think the effect would be negative.

__Inquiry__: Here is a goal statement that appears to be designed to serve students yet the majority of students feel it would be of no effect on them and a negative effect on the system. Why?

3. __Data__: We look to perceptions of benefit. The majority of Policy people see it as benefiting all groups. Deans and Directors feel the same. There is no clear majority in the Faculty. But the Students persist with the majority feeling that no one would benefit.

Inquiry: What affects the students' understanding of the event that they perceive it not to be in their or anyone else's interest?

4. Data: We must look at the quantity of response that comprises those percentages. Turn to item II, Table 50. Tabulation of Resources from Round II. Twelve Policy people, 11 Deans and Directors, 29 Faculty, and 37 Students/Clients participated in those tabulations of percentages.

Inquiry: Are the percentages significant? (See next Data item)

5. Data: We turn now to the data tables in Table 53, page 157. We see that Goal 44 was selected as one of the twenty most interesting goals by 39 individual respondents out of a universe of 75. That is more than 50%. Further, we can see that it is the 8th most frequently picked goal.

Inquiry: Do groups differ in their interest? (See next Data item)

6. Data: In Table 54, page 159, we see that 4 of 10 or 40% of Group 1 put it in the top 10 in priority. Thirty percent (30%) of Group 2, 50% of Group 3, and 16 1/2% of Group 4 locate this goal as a top priority item for attention.

Inquiry: How important is the item to each group?

7. Data: Table 55, pages 161-162. Group 1 ranks Goal 44 5th highest in priority. Group 2 ranks it 7th. Group 3 ranks it 2nd and Group 4, the Students and Clients, rank it 25th. The aggregate see it as ranking 7th in overall priority.

8. Data: We now can explore when people feel this goal can come about in Table 56, pages 164-165. Group 1 is split: 50% see the event happening in the short-term and 50% see it in the long-term future. Group 2, on the other hand, is in total agreement that the event will not happen until the long-term future (even though they see it as positively affecting themselves and post-secondary education generally). The Faculty is spread over the full-time spectrum, as are the Students with the majority seeing the goal only in the long-term.

Inquiry: In reference to the respondents' perception of real time, does the event still rank as a top priority item?

9. Data: In Table 57, page 166, we see that Goal 44 is the second highest priority goal for the long-term future.

Inquiry: Here is a goal that many people think is valuable for the long-term future. They are prepared to believe that it is not a short-term goal. Are they, in effect, offering us sufficient lead time to explore the feasibility of it through research? If so, should we fund such research?

10. Data: In Table 58, page 167, we note that the majority of the goals examined in the survey are seen as short-term.

Inquiry: How do we make them happen? Which client groups are to be served in setting priorities? (See next Data item)

11. Data: Table 59, page 169, displays the goal (ranked) with the time estimate as seen by each group.

12. Data: Table 60, pages 171-172, is probably one of the most important criteria to employ in deciding what goal to pursue. Looking at our goal, we see that 60% of Group 1 see themselves as having the power to cause the event if they wanted to. One hundred percent (100%) of Group 2 see Group 1 as having the power. Sixty-seven (67%) of Group 3 see Group 1 as having the power and 85% of Group 4 see Group 1 as having the power. In the aggregate, 77% of all those who addressed themselves to this goal (39 of 75 people) felt that the power to cause it resided with the Policy apparatus of the State and not with the Students, Faculty, or Directors.

Inquiry: Who has the power to cause each goal as seen by each group?

13. Data: See Table 61, pages 174-175, for the display.

Inquiry: Who is perceived to have the power to affect post-secondary education in New York State?

14. Data: Table 62, page 177, displays the number of times each group is seen as having the power to cause goals examined here to come into being. Groups 1 and 2 are seen as much more powerful than Groups 3 and 4 in terms of the goals generated by the participants in this study.

It is suggested that the reader now make a similar examination of the goals that interest him personally and deliberate about the consensus and dissensus that exists. Figure 3, pages 132 to 144 contains: (1) the goal statements, (2) the responses of the four groups as to the perceived effect of the goal on the individual respondent and on post-secondary education in general, and (3) the respondents' perceptions of the beneficiaries of the goal if implemented.

The following tables of data are presented to assist the reader in the analyzing of the data pertaining to an individual goal statement. For each table, the purpose is explained, examples of interpretation are given, and additional comments about the use of the table are provided.

It is the responsibility of the policy-maker to examine that array of opinion before making plans and setting strategy that affect the lives of all of us.

Lists of Goals With Corresponding Total Number of Respondents Who Included the Goal: Unranked and Ranked

Purpose

The "Unranked" table consists of the goals listed in ascending order of goal number; the "Ranked" table consists of the goals ranked in ascending order to the number of times the goal was responded to.

Example

Unranked--Goal 1 was responded to 11 times.

Goal 40 was responded to 22 times.

Ranked--Goal 1 was the least often mentioned in the responses (11 times).

Goal 28 was most often responded to (55 times).

Comments

This table is useful as a reference table. If one were interested in a particular goal, he could see how often that goal was mentioned in the "unranked" table; then, using the "ranked" table, he could see approximately

TABLE 53

LIST OF GOALS WITH CORRESPONDING TOTAL NUMBER OF RESPONDENTS WHO INCLUDED THE GOAL: UNRANKED AND RANKED

Unranked				Ranked			
Goal	Resp.	Goal	Resp.	Goal	Resp.	Goal	Resp.
1	11	26	48	1	11	21	29
2	23	27	22	12	12	15	30
3	49	28	55	34	13	22	30
4	47	29	23	32	14	9	31
5	39	30	28	36	17	19	31
6	28	31	24	37	20	46	31
7	35	32	14	27	22	33	32
8	26	33	32	40	22	16	33
9	31	34	13	41	22	48	33
10	24	35	25	2	23	47	34
11	42	36	17	13	23	49	34
12	12	37	20	23	23	7	35
13	23	38	28	29	23	17	35
14	38	39	25	10	24	14	38
15	30	40	22	31	24	25	38
16	33	41	22	43	24	5	39
17	35	42	52	35	25	44	39
18	27	43	24	39	25	11	42
19	31	44	39	8	26	45	42
20	26	45	42	20	26	4	47
21	29	46	31	24	26	26	48
22	30	47	34	18	27	3	49
23	23	48	33	6	28	42	52
24	26	49	34	30	28	28	55
25	38			38	28		

Total Number of Respondents: 75

where, among all the other goals, it ranked, giving a measure of how much interest there was in that particular goal.

If we were interested in Goal 5 we could see from the "unranked" table that there were 39 respondents who mentioned that goal. Looking then to the "ranked" table, we see that 39 responses was relatively high, telling us that Goal 5 was generally of high interest.

Number of Times Goal Seen as Among Top Ten in Priority, by Group and Aggregate

Purpose

This table lists the number of times each goal was seen as one of the top ten in priority. The box in the bottom right corner lists the number of respondents for each group, and the total number of respondents when all groups are aggregated.

Example

Goal 1 was not mentioned by any of the 10 respondents in Group 1 as being among the top ten in priority.

It was mentioned by two members of Group 2.

No members of Group 3.

Four members of Group 4.

Of all the respondents, six mentioned Goal 1 as being among the top ten in priority.

Comments

Note that it is important when interpreting this table, as well as the following tables, to keep in mind the total number of respondents for each group. Goal 5, for instance, was listed four times (40% of the respondents)

TABLE 54

NUMBER OF TIMES GOAL SEEN AS AMONG TOP TEN IN PRIORITY, BY GROUP AND AGGREGATE

	Group						Group				
Goal	I	II	III	IV	Agg.	Goal	I	II	III	IV	Agg.
1	0	2	0	4	6	26	5	8	10	4	30
2	1	0	3	2	6	27	0	3	4	2	10
3	4	2	11	14	33	28	3	4	9	24	42
4	4	1	7	11	25	29	2	0	7	3	13
5	4	0	2	9	15	30	0	3	3	7	13
6	2	3	3	2	11	31	2	1	3	2	8
7	4	2	5	11	22	32	1	0	2	0	3
8	1	0	2	6	9	33	3	3	7	8	22
9	2	3	5	6	16	34	0	2	2	0	4
10	1	1	1	5	8	35	0	1	4	6	12
11	2	3	8	9	22	36	1	2	2	4	9
12	1	1	0	2	4	37	0	2	1	3	6
13	2	0	0	5	7	38	1	1	6	9	17
14	3	2	10	6	23	39	0	1	3	4	8
15	1	1	4	6	13	40	2	4	3	3	12
16	2	2	3	5	12	41	2	2	1	2	9
17	5	3	8	4	21	42	5	5	14	12	39
18	3	2	2	2	9	43	3	3	7	6	19
19	1	3	4	9	19	44	4	3	11	5	24
20	4	2	4	4	14	45	1	2	6	10	19
21	3	1	2	6	12	46	4	4	9	6	24
22	1	1	3	12	18	47	3	5	3	10	21
23	1	0	4	4	10	48	3	1	10	4	19
24	2	0	3	5	10	49	1	1	2	5	9
25	1	1	5	9	16						

No. Respondents

Group 1 - 10
Group 2 - 10
Group 3 - 22
Group 4 - 30
Aggreg. - 72

by Group 1 and nine times (30% of the respondents) by Group 4. It seems to have a higher priority among Group 1 than Group 4 but it was mentioned fewer times.

Ranking According to Number of Times Seen as Among Top Ten in Priority, by Group and Aggregate

Purpose

This table contains the same data as the preceding table, but, for each group, the goals are arranged in descending order according to the number of times they were mentioned.

Example

Goals 42, 26 and 17 were most often mentioned (5 times) by Group 1. Goal 42 was also mentioned most often by Group 3 (14 times).

Comments

It is interesting to look at the relative positions of certain "high priority" goals across groups: Goal 26 was given a high priority by Groups 1, 2, and 3, but a relatively low priority by Group 4. One is led to ask why it is that the Policy-makers, Deans, and Faculty members see this goal as important, yet the Clients seem to find it unimportant. (Goal 26: "The Regents of the State of New York have asked colleges in each region of the State to plan their offerings cooperatively.")

TABLE 55

RANKINGS ACCORDING TO NUMBER OF TIMES SEEN AS AMONG TOP TEN IN PRIORITY, BY GROUP AND AGGREGATE

	Group I		Group II		Group III		Group IV		Agg.	
Rank	Goal	No.	Goal	No.	Goal	No.	Goal	No.	Goal	No.
1	42	5	26	8	42	14	28	24	28	42
2	26	5	47	5	44	11	3	14	42	39
3	17	5	42	5	3	11	42	12	3	33
4	46	4	46	4	48	10	22	12	26	30
5	44	4	40	4	26	10	7	11	4	25
6	20	4	28	4	14	10	4	11	46	24
7	7	4	44	3	46	9	47	10	44	24
8	5	4	43	3	28	9	45	10	14	23
9	4	4	33	3	17	8	38	9	33	22
10	3	4	30	3	11	8	25	9	11	22
11	48	3	27	3	43	7	19	9	7	22
12	47	3	19	3	33	7	11	9	47	21
13	43	3	17	3	29	7	5	9	17	21
14	33	3	11	3	4	7	33	8	48	19
15	28	3	9	3	45	6	30	7	45	19
16	21	3	6	3	38	6	46	6	43	19
17	18	3	45	2	25	5	43	6	19	19
18	14	3	41	2	9	5	35	6	22	18
19	41	2	37	2	7	5	21	6	38	17
20	40	2	36	2	35	4	15	6	25	16
21	31	2	34	2	27	4	14	6	9	16
22	29	2	20	2	23	4	9	6	5	15
23	24	2	18	2	20	4	8	6	20	14
24	16	2	16	2	19	4	49	5	30	13
25	13	2	14	2	15	4	44	5	29	13
26	11	2	7	2	47	3	24	5	15	13
27	9	2	3	2	40	3	16	5	40	12

TABLE 55--Continuation

Rank	Group I Goal	Group I No.	Group II Goal	Group II No.	Group III Goal	Group III No.	Group IV Goal	Group IV No.	Agg. Goal	Agg. No.
28	6	2	1	2	39	3	13	5	35	12
29	49	1	49	1	31	3	10	5	21	12
30	45	1	48	1	30	3	48	4	16	12
31	38	1	39	1	24	3	39	4	6	11
32	36	1	38	1	22	3	36	4	27	10
33	32	1	35	1	16	3	26	4	24	10
34	25	1	31	1	6	3	23	4	23	10
35	23	1	25	1	2	3	20	4	49	9
36	22	1	22	1	49	2	17	4	41	9
37	19	1	21	1	36	2	1	4	36	9
38	15	1	15	1	34	2	40	3	18	9
39	12	1	12	1	32	2	37	3	8	9
40	10	1	10	1	21	2	29	3	39	8
41	8	1	4	1	18	2	41	2	31	8
42	2	1	32	0	8	2	31	2	10	8
43	39	0	29	0	5	2	27	2	13	7
44	37	0	24	0	41	1	18	2	37	6
45	35	0	23	0	37	1	12	2	2	6
46	34	0	13	0	10	1	6	2	1	6
47	30	0	8	0	13	0	2	2	34	4
48	27	0	5	0	12	0	34	0	12	4
49	1	0	2	0	1	0	32	0	32	3

No. Respondents

Group 1 - 10
Group 2 - 10
Group 3 - 22
Group 4 - 30
Aggreg. - 72

Percent of Groups Seeing Time Frame as Short-Term, Medium-Term, Long-Term, Respectively, for Each Goal, by Group and Aggregate

Purpose

These data are based on respondents' replies concerning when they thought the goals could or should occur.

Example

One hundred percent of Group 1 who responded to Goal number 6 saw the goal to be short-term.

One-half of Group 2 who responded saw it as medium-term, and one-half saw it as short-term.

Considering the aggregate group, 61% saw Goal 6 as short-term, 26% saw it as medium-term, and 13% saw it as long-term.

Comments

This table is useful if one has a particular goal in mind and he would like some measure of the time frame in terms of which each group thinks of the goal, and how much agreement there is among the groups as to the time frame.

Top Ten Short-Term, Medium-Term, and Long-Term Goals Based on Aggregate Responses

Purpose

In this table only the data from the "aggregate" column of Table 57 are considered. The ten goals receiving the highest percentages as short-term are listed, as well as the ten receiving the highest percentages as medium-term and as long-term.

TABLE 56

PERCENT OF GROUPS SEEING TIME FRAME AS SHORT-TERM, MEDIUM-TERM, LONG-TERM, RESPECTIVELY, FOR EACH GOAL, BY GROUP AND AGGREGATE

	Group I			Group II			Group III			Group IV			Agg.		
Goal	ST	MT	LT	ST	MT	LT	ST	MT	LT	ST	MT	LT	ST	MT	LT
1	0	0	0	50	25	25	0	0	0	50	25	25	50	25	25
2	0	0	100	0	0	100	33	0	67	11	0	89	12	6	82
3	50	50	0	20	80	0	40	47	13	47	47	5	40	51	9
4	0	50	50	0	40	60	56	22	22	39	44	17	34	39	26
5	50	0	50	33	33	33	71	14	14	20	60	20	38	38	24
6	100	0	0	50	50	0	57	29	14	57	14	29	61	26	13
7	50	25	25	67	33	0	63	38	0	67	20	13	63	27	10
8	100	0	0	50	50	0	100	0	0	54	38	8	65	30	5
9	100	0	0	50	50	0	70	30	0	67	33	0	69	31	0
10	100	0	0	100	0	0	100	0	0	91	9	0	94	6	0
11	33	67	0	67	33	0	36	45	18	33	50	17	35	48	16
12	50	50	0	0	100	0	0	0	0	75	0	25	64	18	18
13	50	50	0	0	100	0	40	20	40	56	44	0	50	39	11
14	33	67	0	20	60	20	64	18	18	42	42	17	45	39	15
15	100	0	0	67	33	0	88	13	0	64	27	9	76	20	4
16	67	33	0	0	100	0	50	0	50	23	54	23	32	44	24
17	60	40	0	50	50	0	40	40	20	40	40	20	47	38	16
18	75	25	0	40	60	0	17	83	0	80	20	0	45	50	5
19	100	0	0	20	60	20	71	29	0	82	18	0	67	30	4
20	25	50	25	33	67	0	40	40	20	22	56	22	27	55	18
21	50	25	25	33	33	33	80	20	0	67	22	11	64	23	14
22	0	100	0	0	100	0	67	33	0	31	63	6	41	56	4
23	100	0	0	0	100	0	63	25	13	43	43	14	56	33	11
24	67	0	33	100	0	0	86	14	0	89	11	0	85	10	5+
25	67	33	0	67	0	33	89	11	0	75	25	0	77	19	3

TABLE 56--Continuation

Goal	Group I ST	Group I MT	Group I LT	Group II ST	Group II MT	Group II LT	Group III ST	Group III MT	Group III LT	Group IV ST	Group IV MT	Group IV LT	Agg. ST	Agg. MT	Agg. LT
26	57	0	43	33	44	22	43	43	14	20	40	40	37	35	28
27	50	50	0	100	0	0	71	29	0	50	50	0	63	32	5
28	100	0	0	57	29	14	50	50	0	77	23	0	67	29	4
29	50	0	50	0	100	0	14	43	43	57	43	0	33	44	22
30	100	0	0	50	50	0	83	0	17	55	45	0	64	32	5
31	50	50	0	67	0	33	57	43	0	50	33	17	58	32	11
32	50	50	0	50	0	50	100	0	0	67	33	0	75	17	8
33	67	33	0	20	20	60	67	33	0	55	18	27	55	24	21
34	0	100	0	75	25	0	67	0	33	0	100	0	56	33	11
35	50	50	0	75	25	0	40	40	20	29	29	43	43	38	19
36	100	0	0	100	0	0	67	0	33	75	25	0	79	14	7
37	100	0	0	17	83	0	50	25	25	63	38	0	47	47	5
38	100	0	0	0	67	33	67	17	17	64	27	9	57	30	13
39	50	50	0	0	33	67	40	20	40	38	13	50	33	22	44
40	0	67	33	25	75	0	67	17	17	75	25	0	47	41	12
41	100	0	0	50	50	0	50	50	0	50	50	0	50	50	0
42	50	17	33	40	60	0	41	41	18	53	35	12	46	40	15
43	75	25	0	67	33	0	63	25	13	71	29	0	68	27	5
44	50	0	50	0	0	100	23	31	46	27	18	55	25	22	53
45	33	67	0	67	33	0	62	38	0	57	29	14	54	37	9
46	0	50	50	75	25	0	64	18	18	20	50	30	43	33	23
47	50	50	0	67	33	0	50	50	0	77	15	8	67	30	4
48	67	33	0	0	0	100	45	9	45	40	20	40	41	19	41
49	33	33	33	33	33	33	33	17	50	80	0	20	52	13	35

No. Respondents

Group 1 - 10
Group 2 - 10
Group 3 - 22
Group 4 - 30
Aggreg. - 72

TABLE 57

TOP TEN SHORT-TERM, MEDIUM-TERM, AND LONG-TERM GOALS BASED ON AGGREGATE RESPONSES

	Short-Term		Medium-Term		Long-Term		
Rank	Goal	Pct.	Goal	Pct.	Goal	Pct.	
1	10	94	22	56	2	82	
2	24	85	20	55	44	53	
3	36	79	3	51	39	44	No. Respondents
4	25	77	41	50	48	41	
5	15	76	18	50	49	35	Group 1 - 10
6	32	75	11	48	26	28	Group 2 - 10
7	9	69	37	47	4	26	Group 3 - 22
8	43	68	29	44	1	25	Group 4 - 30
9	47	67	16	44	16	24	Aggreg. - 72
10	28	67	40	41	5	24	

Example

Goal 10 was rated as short-term in 94% of the responses.

Goal 22 was seen the highest percentage of the time (56%) as medium-term.

Goal 2 was rated the highest percentage of the time (82%) as long-term.

Comments

A quick look at the table indicates that most of the respondents saw most of the goals as short-term. Only two goals were seen by more than 50% of the respondents as long-term, Goals 2 and 44. Goal 2 had a very low interest and priority ranking. Goal 44 had a high interest ranking and a high priority ranking among all but Group 4, (which all groups see as the beneficiary). (Goal 44: "New York State is exploring a proposal that would have the effect of ending continuous learning through age 16. The proposal involves guaranteeing each resident fourteen years of free access to the public schools of the State that can be used through the individual's life.")

Percent of Groups Seeing Time Frame as Short-Term, Medium-Term, and Long-Term, All Goals Aggregated

Purpose

This table is generated by summing all the time-frame responses for all the goals, by group. It is supposed to reflect each group's general view of the time-frame for all the goals taken together.

Example

Fifty-five percent of all the responses to the time-frame question by Group 1 were short-term, 29% were medium-term, and 16% were long-term.

Comments

Clearly the goals were most often seen as short-term, though Group 2 tended more toward medium-term and less toward short-term than the other groups.

TABLE 58

PERCENT OF GROUPS SEEING TIME FRAME AS SHORT-TERM, MEDIUM-TERM, LONG-TERM, ALL GOALS AGGREGATED

Group I			Group II			Group III			Group IV			Agg.		
ST	MT	LT	ST	MT	LT	ST	MT	LT	ST	MT	LT	ST	MT	LT
55	29	16	41	42	17	56	29	15	53	32	15	52	33	16

No. Respondents

Group 1	10
Group 2	10
Group 3	22
Group 4	30
Aggreg.	72

Goals That Were Among the Top Fifteen in Priority Compared With Time-Frame Responses

Purpose

This table allows one to see the top 15 priority goals for each group, along with the consensus view of the group as to its time-frame. Consensus is defined as 40% or greater agreement.

Example

Group one's highest priority goal was Goal 42, which 50% of the Group 1 respondents considered short-term.

Group two's sixth highest priority goal was Goal 28, and 57% of the Group 2 respondents felt that it ought to be a short-term goal.

Comments

A quick glance at the table reveals that most of the high priority goals were seen as short-term, particularly for Group 3. (Note: Only the consensus percentage is listed; other places were filled in with zeroes. Hence a zero does not indicate that no respondents saw the goal in question as having the corresponding time-frame. It only indicates that the majority did not see that as the time-frame. When there are three zeroes, such as in the case of Group two's response to Goal 26, then there was no consensus.)

Perceptions of Power: Group Seen as Most Powerful, Percentage of Responding Group Who Saw Indicated Group With Power, and Number Who Responded to That Goal

Key: A = group seen as having power

B = percentage who saw that group as having the power

C = number who responded to that goal

Zero indicates "no consensus"

TABLE 59

GOALS THAT WERE AMONG THE TOP FIFTEEN IN PRIORITY COMPARED WITH TIME-FRAME RESPONSES[1]

	Group I				Group II				Group III				Group IV				Aggregate			
Rank	Goal	ST	MT	LT	Goal	ST	MT	LT	Goal	ST	MT	LT	Goal	ST	MT	LT	Goal	ST	MT	LT
1	42	50	0	0	26	0	44	0	42	41	41	0	28	77	0	0	28	67	0	0
2	26	57	0	0	47	67	0	0	44	0	0	46	3	47	47	0	42	46	0	0
3	17	60	0	0	42	0	60	0	3	0	47	0	42	53	0	0	3	0	51	0
4	46	0	50	50	46	75	0	0	48	45	0	45	22	0	63	0	26	0	0	0
5	44	50	0	50	40	0	75	0	26	43	43	0	7	67	0	0	4	0	0	0
6	20	0	50	0	28	57	0	0	14	64	0	0	4	0	44	0	46	43	0	0
7	7	50	0	0	44	0	0	100	46	64	0	0	47	77	0	0	44	0	0	53
8	5	50	0	50	43	67	0	0	28	50	50	0	45	57	0	0	14	45	0	0
9	4	0	50	50	33	0	0	60	17	40	40	0	38	64	0	0	33	55	0	0
10	3	50	50	0	30	50	50	0	11	0	45	0	25	75	0	0	11	0	48	0
11	48	67	0	0	27	100	0	0	43	63	0	0	19	82	0	0	7	63	0	0
12	47	50	50	0	19	0	60	0	33	67	0	0	11	0	50	0	47	67	0	0
13	43	75	0	0	17	50	50	0	29	0	43	43	5	0	60	0	17	47	0	0
14	33	67	0	0	11	67	0	0	4	56	0	0	33	55	0	0	48	41	0	41
15	28	100	0	0	9	50	50	0	45	62	0	0	30	55	0	0	45	54	0	0

No. Respondents

Group 1 - 10
Group 2 - 10
Group 3 - 22
Group 4 - 30
Aggreg. - 72

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[1] Percentage responses from each group for each time frame given only if percentage greater than or equal to 40.

Purpose

This table is meant to give some indication of each group's perception of who had the power to bring about each goal, together with some idea of how much agreement there was within the group as to the indicated perception.

Example

Consider Goal 18: look at the first column under "Group 1" (Column "A"); you will notice that Group 2 is seen by Group 1 as having the power.

Column "B" indicates that 80% of the respondents from Group 1 felt this way (i.e., that Group 2 had the power).

Column "C" indicates that there were five members of Group 1 who responded to Goal 18.

Now look at Group three's response to Goal 18: Columns "A" and "B" both have zeroes in them, indicating that there was no consensus. Thus, no single group got 40% or more of Group 3 respondent's votes.

Comments

This table is useful if you have a particular goal in mind and would like to see whom any or all of the groups saw as having the power. Sometimes it is interesting to read across the row for a particular goal to see what kind of agreement there is among the groups. There seems to be no agreement among the various groups on who has the power to bring about Goal 15. Goal 21 is interesting in that all groups--except Group 2--see Group 2 as having the power to bring it about.

TABLE 60

PERCEPTIONS OF POWER: GROUP SEEN AS MOST POWERFUL, PERCENTAGE OF RESPONDING GROUP WHO SAW INDICATED GROUP WITH POWER, AND NUMBER WHO RESPONDED TO THAT GOAL

	Group I			Group II			Group III			Group IV			Aggregate		
Goal	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
1	0	0	0	2	75	4	2	100	1	2	50	6	2	64	11
2	0	0	2	1	100	2	1	100	6	1	92	12	1	91	23
3	1	80	5	1	100	7	1	63	16	1	68	19	1	71	49
4	0	83	6	1	100	6	1	50	12	1	57	21	1	55	47
5	0	0	5	4	67	6	1	50	10	0	0	18	0	0	39
6	1	75	8	1	75	4	1	57	7	1	100	7	1	75	28
7	0	0	4	0	50	4	0	0	10	2	44	16	0	0	35
8	0	0	3	0	0	2	2	67	6	2	73	15	2	65	26
9	1	67	3	1	50	4	2	58	12	2	67	12	2	48	31
10	2	100	1	2	100	2	0	0	6	2	79	14	2	75	24
11	1	43	7	1	60	5	1	54	13	1	73	15	1	57	42
12	0	0	2	2	100	1	2	100	1	3	50	8	3	42	12
13	1	75	4	1	100	1	0	0	7	1	50	10	1	48	23
14	1	50	4	1	86	7	1	58	12	1	46	13	1	58	38
15	4	50	4	2	67	3	0	0	9	0	0	13	0	0	30
16	0	0	8	0	0	3	2	50	8	2	43	14	2	42	33
17	0	0	7	1	50	4	0	0	11	2	40	10	0	0	35
18	2	80	5	2	60	5	0	0	8	0	0	6	2	44	27
19	2	67	3	2	60	5	2	100	8	2	92	13	2	87	31
20	2	80	5	2	75	4	2	80	5	2	82	11	2	81	26
21	2	100	5	1	67	3	2	88	8	2	64	11	2	76	29
22	3	67	3	1	100	1	0	0	8	2	63	16	2	53	30
23	0	0	3	0	100	1	2	40	10	2	75	8	2	52	23
24	2	80	5	2	100	1	2	50	10	2	67	9	2	65	26
2[illegible]	2	80	5	2	67	3	2	50	12	2	53	17	2	58	38
26	1	71	7	1	56	9	1	56	16	0	0	13	1	50	48
27	2	100	2	2	50	4	2	43	7	2	43	7	2	55	22

TABLE 60 --Continuation

Goal	Group I A	Group I B	Group I C	Group II A	Group II B	Group II C	Group III A	Group III B	Group III C	Group IV A	Group IV B	Group IV C	Aggregate A	Aggregate B	Aggregate C
28	1	80	5	0	0	6	1	53	15	2	44	27	1	44	55
29	2	67	3	2	100	2	2	44	9	2	63	8	2	61	23
30	1	100	2	0	0	5	0	0	6	0	0	15	0	0	28
31	1	50	6	0	0	3	3	43	7	2	67	6	0	0	24
32	0	0	2	0	0	2	2	40	5	2	50	4	0	0	14
33	0	0	3	1	80	5	1	50	10	1	46	13	1	50	32
34	2	100	2	0	0	4	2	40	5	2	100	2	2	62	13
35	2	67	3	2	50	4	0	0	6	0	0	9	2	48	25
36	4	100	1	2	100	2	3	50	6	0	0	8	0	0	17
37	1	100	1	0	0	6	1	75	4	1	56	9	1	55	20
38	0	0	3	3	50	4	3	63	8	2	58	12	3	43	28
39	0	0	3	4	40	5	2	71	7	2	40	10	2	44	25
40	2	50	4	0	50	4	2	75	8	2	67	6	2	55	22
41	1	80	5	1	100	2	1	67	6	2	71	7	1	55	22
42	0	43	7	2	57	7	3	47	17	0	0	18	0	0	52
43	0	0	4	1	100	3	1	63	8	1	56	9	1	63	24
44	1	60	5	1	100	5	1	67	15	1	85	13	1	77	39
45	2	67	3	0	75	4	2	53	15	2	53	17	2	52	42
46	1	100	5	1	67	3	1	67	12	1	70	10	1	74	31
47	0	0	4	0	0	6	1	57	7	0	41	17	0	0	34
48	1	80	5	0	0	3	1	73	11	1	75	12	1	70	33
49	0	0	5	0	0	6	0	50	10	2	75	12	2	44	34

No. Respondents

Group 1 - 10
Group 2 - 10
Group 3 - 22
Group 4 - 30
Aggreg. - 72

Key: A = group seen as having power, B = percent who saw that group as having the power, C = number who responded to that goal. Zero = "no consensus."

The Assignment of Power, as Seen by Groups 1, 2, 3, 4, and Aggregate

Purpose

This table is really five tables, one table corresponding to each group. It is generated from the data shown in the last table, and designed to show how influential ("powerful") each of the groups sees each group.

Example

Consider the first table (upper left), "Goals which Group 1 is seen as..." The first column in that table indicates that Group 1 sees itself as having the power to cause Goals 3, 6, 9, 11, 13, 14,...and 48 to occur. The second column indicates that Group 2 sees Group 1 as having the power to cause Goals 2, 3, 4, 6,...and 46 to occur.

Comments

Notice that the last table (lower right) is a listing of the goals for which no consensus was seen as to who had the power. There seems to have been less agreement among the members of Groups 1 and 2, respectively, than there was among the other groups, as indicated by the lengths of the columns.

It also seems apparent from the third and fourth tables (pertaining to Groups 3 and 4, respectively) that Groups 3 and 4 were not, in general, seen as powerful.

Number of Times Each Group Is Seen as Having the Power, as Seen by Each of the Groups and Aggregate

Purpose

This table is simply a summation of the number of entries in each column in the last table.

TABLE 61

THE ASSIGNMENT OF POWER, AS SEEN BY GROUPS I, II, III, IV AND AGGREGATE

Group I	Group II	Group III	Group IV	Aggregate	Group I	Group II	Group III	Group IV	Aggregate
Goals Which Group I is Seen as Having the Power to Cause, as Seen by Groups I, II, III, IV, and Aggregate:					Goals Which Group III is Seen as Having the Power to Cause, as Seen by Groups I, II, III, IV, and Aggregate:				
3	2	2	2	2	22	38	31	12	12
6	3	3	3	3			36		38
9	4	4	4	4			38		
11	6	5	6	6			42		
13	9	6	11	11					
14	11	11	13	13					
26	13	14	14	14					
28	14	26	33	26					
30	17	28	37	28					
31	21	33	43	33	Goals Which Group IV is Seen as Having the Power to Cause, as Seen by Groups I, II, III, IV, and Aggregate:				
37	22	37	44	37					
41	26	41	46	41					
44	33	43	48	43					
46	41	44		44	15	5			
48	43	46		46	36	39			
	44	47							
	46	48							

TABLE 61--Continuation

Group I	Group II	Group III	Group IV	Aggregate	Group I	Group II	Group III	Group IV	Aggregate
Goals Which Group II is Seen as Having the Power to Cause, as Seen by Groups I, II, III, IV, and Aggregate:					Goals Which No Group is Seen as Having the Power to Cause, as Seen by Group I, II, III, IV, and Aggregate:				
10	1	1	1	1	1	7	7	5	5
18	10	8	7	8	2	8	10	15	7
19	12	9	8	9	4	16	13	18	15
20	15	12	9	10	5	23	15	26	17
21	18	16	10	16	7	28	17	30	30
24	19	19	16	18	8	30	18	35	31
25	20	20	17	19	12	31	22	36	32
27	24	21	19	20	16	32	30	42	36
29	25	23	20	21	17	34	35	47	42
34	27	24	21	22	23	37	49		47
35	29	25	22	23	32	40			
40	35	27	23	24	33	45			
45	36	29	24	25	38	47			
	42	32	25	27	39	48			
		34	27	29	42	49			
		39	28	34	43				
		40	29	35	47				
		45	31	39	49				
			32	40					
			34	45					
			38	49					
			39						
			40						
			41						
			45						
			49						

Example

Under "Group 1" it can be seen that Group 1 saw itself as having the power 15 times, while Group 2 saw Group 1 as having the power 17 times.

Comments

It appears that Group 2 is in general seen as the most powerful group with respect to this total set of goals.

TABLE 62

NUMBER OF TIMES EACH GROUP IS SEEN AS HAVING THE POWER, AS SEEN BY EACH OF THE GROUPS AND AGGREGATE

Each Group as Seen By	Group I	Group II	Group III	Group IV	Aggregate
Group 1	15	17	17	13	16
Group 2	13	14	18	26	21
Group 3	1	1	4	1	2
Group 4	2	2	0	0	0
Group 5	18	15	10	9	10

No. Respondents	
Group 1	10
Group 2	10
Group 3	22
Group 4	30
Aggreg.	72

CHAPTER IV

AN EVALUATION OF ALTERNATIVE DATA-COLLECTION SYSTEMS FOR POST-SECONDARY CONTINUING EDUCATION

The need for additional information for use by planners concerned with developing a comprehensive, long-range master plan for post-secondary continuing education was the reason for undertaking the entire project. Thus, a third purpose of the project was to assess the feasibility of integrating the two data-collection systems used in this study into the existing management information system of the New York State Education Department. This phase of the project involved the following tasks: (1) identifying the capabilities of the present information system; (2) identifying the strengths and weaknesses of the two data systems developed for this study; (3) assessing the feasibility of integrating the Focus Delphi and Instructional Activity Survey instruments into the present information collection system; and (4) identifying alternative approaches for collecting data pertaining to post-secondary continuing education.

Existing Capabilities

Three sources of information about the New York State Education Department information system were consulted. Interviews were held with personnel in the Bureau of Statistical Services and Bureau of Special College Programs, and data-collection instruments and published reports were examined.

As with many organizations, the State Education Department (SED) has been in the process of changing from a reporting system based on pencil and paper summaries to a system which utilizes the capabilities of computers. The conversion process often proceeds in two general stages. First, the existing data-collection system is transfered to the computer. As information processors and users acquire experience with the potential and limitations of the computer, a second stage develops. At this point, the existing system can be evaluated in terms of the amount and appropriateness of the information inputs into the system; new sources of information and additional alternative data-collection techniques can be explored.

It appears that the SED is involved in this first stage of development. The Department is presently in the process of coordinating all educational information systems in one unit. Generally, this includes three existing systems: the Higher Education Data System (HEDS), the Basic Education Data System (BEDS), and the Occupational Studies Data System (OSDS).

Four important characteristics of these systems need to be noted as one considers alterations to the system such as the integration of an additional instrument into the overall system. These characteristics include:

1. Level of data aggregation - All three subsystems (HEDS, BEDS, and OSDS) are designed to gather information from an institution about its total population. This information is obtained in the form of summary statistics about the institution as a whole. These systems are not designed to provide information about individual students, faculty, departments, or programs.
2. Data collection - These systems are designed to collect data at a single point in time on a regular basis--usually yearly. Also, data are collected from every institution on the total populations in the respective areas. Allowing time for compilation and analysis of the data, this can result

in findings being based on data that are two years old.

3. System uniformity - The subsystems (HEDS, BEDS, OSDS) are designed to have approximately the same structure and level of aggregation so that each fits neatly into the overall system.

4. System alteration - The development of an overall system from the existing data-collection systems has proved difficult and time consuming. Major alterations or additions to the present system appear to be a factor of time (to clarify what is wanted from the system) and of resources (to gain experience with the system with various options).

Thus, the current need appears to be achieving some degree of stability in utilizing the existing data systems. Once this is achieved, interest will no doubt turn to the complex and difficult task of finding ways to utilize the capabilities of the computer in new and creative ways. It seems reasonable, therefore, for the Bureau of Special College Programs to evaluate and identify their information needs for post-secondary continuing education and to continue explorations with the Bureau of Statistical Services for the purpose of obtaining this information.

Assessing the Instructional Activity Survey and Focus Delphi as Alternative Data-Collection Systems

If we look at the task of collecting data as a system, then it is appropriate to view it as a dynamic, ever-changing entity. The system changes from time to time as a result of use, continuing evaluation, the emergence of needs, and re-use.

Since no single information system can be expected to provide all data that are needed, the strengths and limitations of the Instructional Activity Survey and Focus Delphi were examined. The experiences of the research team and the responses of participants were used in arriving at the following conclusions.

Strengths - The concepts of "instructional activity" and "perceived needs of continuing education" which the instrumentation sought to measure are valid bases for long-range planning. A major purpose of educational institutions is to provide instruction; therefore, a description of what is being provided is an essential starting point for policy formulation. Likewise, the needs of continuing education as perceived by relevant groups (i.e., policy planners, continuing educators, students) provide standards and direction as to what continuing education should be doing. Thus, the gaps or differences between what is and what ought to be can be more readily identified as a basis for policy determination.

Both survey instruments provided new types of data that could supplement the data already obtained by existing data-collection systems. Data were obtained from groups (i.e., instructors, students, and continuing education administrators) that are seldom queried about adult education policy. Both instruments also allowed for a greater specificity of information than is possible in institutional reports.

Finally, the Instructional Activity Survey instrument allowed for cross tabulation of data (e.g., educational objectives by subject matter, age of student, etc.) at a lower level of aggregation than present instruments, thus allowing construction of a sharper and more detailed profile of student population and activities.

Weaknesses - The primary weakness of both data-collection instruments was the inability to receive a desired response rate. In the institutional survey, 53 percent of the questionnaires that could be delivered were returned by respondents. An additional 9 percent of the questionnaires were returned by respondents who declined to participate and 37 percent of the questionnaires were not returned. The percentage of usable responses for the three Focus Delphi Rounds varied among the four groups from 11 to 39 percent; the overall percentages for Rounds I, II, and III were 20, 21, and 17 respectively.

Several reasons may help explain why the low response to both instruments was obtained: (1) overcoming tradition, (2) a lack of understanding regarding the significance of participation, (3) concerns about invasion of privacy, and (4) skepticism of social science research.

Overcoming tradition or resistance to change probably presented the most significant hurdle. Faculty members and policy planners traditionally have not been surveyed for detailed information about their activities and/or opinions in the field of continuing education. The request for information was viewed by many as an imposition on their time which they were unwilling to donate for the purpose of research.

It was also obvious that many respondents were not convinced of the significance of their participation in the study. The idea of obtaining citizen inputs into policy formulation is still a new concept, and perhaps the significance of this behavior has yet to become appreciated by the general public. The importance of participation has to be recognized for busy people to take one or more hours of time to provide information to someone else. Since college and university personnel are often reimbursed for providing advice and consultation, it may be necessary to provide a small honorarium in exchange for a commitment for providing essential information for planning purposes in the future.

Numerous respondents also voiced concerns about the invasion of their privacy by the request for certain kinds of information, such as the number of instructional activities and the length of these activities. The concern expressed most frequently was that the State was checking on how faculty members spend their time. While some respondents may have used this as an excuse to avoid participation, others raised sincere questions as to the motivations underlying the project. A variety of means (e.g., obtaining approval of the study from university administrators, contact by a college or university official serving as liaison for the study, identification of the purposes of the study in the questionnaires, and personal communication via letter and/or telephone) was used to inform and reassure participants about the legitimacy of the purposes of the study. However, not all lingering doubts were satisfied.

A lack of confidence in social science research methodology was also expressed. This view was expressed by faculty members from the physical and biological sciences. Such individuals who were likely to be involved in conducting controlled experiments were skeptical about the "rigor" of social science research methodologies in general. Again, the inability to deal with this on a face-to-face basis prevented the elimination of this reason for nonparticipation.

A second limitation to obtaining a high response rate is probably related to specific decisions that were made by the research team. In retrospect, the scope of the study was probably too ambitious. Perhaps involving fewer people from fewer institutions would have resulted in greater participation. The need for person-to-person contact, while evident throughout the study, was restricted to written and telephone communication. With fewer institutions, it would be possible for members of the research team to visit each institution and assist respondents on a face-to-face basis. Also, the amount and kind of personalized process designed to educate and interest the respondent was underestimated. This also related to the size of the project and the amount of resources needed for intensive followup activities.

Another strategy decision that seemed to affect participation adversely was level of simplicity needed for completing the data-collection forms. To some, the task seemed formidable; others apparently did not understand how to provide data.

In summarizing the strengths and weaknesses of the Instructional Activity Survey and Focus Delphi data-collection devices, the following conclusions were reached:

1. Data pertaining to "instructional activities" and "perceived continuing education needs" are appropriate for the purposes of long-range planning
2. The existing SED data-collection systems--at the present time--have been developed to collect other kinds of data
3. The two instruments have the potential for collecting data about "needs" and "instructional activities"
4. The data-gathering approaches employing certain traditional techniques will need to be revised if a high response rate is desired. The need for innovation seems most important in the area of personal contacts with all respondents, of possible payment for participation, and in the process of educating participants about the study.

Feasibility of Integrating the Data-Collection Systems

An initial aim of the project was to examine the feasibility of integrating the data-collection processes developed for this study into the SED Information System. By juxtaposing the characteristics of the SED system presented earlier with the characteristics of the Instructional Activity Survey and Focus Delphi subsystem, the following conclusions were reached:

1. Level of aggregation - The data-collection subsystem used in the project

gathered information at the level of individual instructors, students, administrators and policy planners. This means that the raw data were gathered at a level different from the data obtained by the SED system. These data are obtained at the institutional level. Thus, the formats are different, some kinds of data would be quite different, and the techniques for analyzing the data would be different.

2. Data-collection - The project data-collection system focused on activities of four sub-populations over a specified period of time, rather than on a population of a higher education institution at a single point of time. Also, the new subsystem provided certain information from a sample of the total population from which the activities of the total population could be inferred.
3. System uniformity - The project data-collection subsystem does not have the same structure or level of aggregation as the SED system. Thus, it would be difficult to integrate the Instructional Activity Survey and the Focus Delphi into the overall system.
4. System alteration - The integration of the project data-collection system into the SED system and its use on a regular basis would require major alterations in the present SED system at the level of data-gathering and at the level of storage. Major alterations such as these would be inappropriate at a time the SED system is attempting to consolidate the already-existing data-collection subsystems into an overall information system for the State Education Department. Once this has been accomplished, however, it would be appropriate to explore how the SED system can provide additional data-collection, storage, and retrieval services.

Given the above considerations, it seems reasonable to recommend that the project data-collection system not be incorporated into the present SED management information system in the same sense that the HEDS, BEDS, and OSDS are being incorporated. However, technical difficulties aside, there appear to be compelling arguments for the consolidation of a data-gathering and analysis subsystem such as this one into the SED policy planning system in some capacity. There is an enormous amount of important information about the clientele, their objectives and interests, and the offerings provided which would be useful in policy planning if it could be acquired and interpreted.

Approaches for Alternative Data Collection

On the basis of this study, there appear to be five strategies from which the SED can choose in establishing a continuing data-gathering system for post-secondary continuing education. They are: (1) utilize the existing SED management information system, (2) incorporate certain additional categories of desired information into the SED system, (3) integrate the project data-collection subsystem (or similar subsystem) into the SED management information system, (4) supplement the existing SED information system with the project data-collection subsystem (or similar system), or (5) consider data-collection subsystems that are developed for the purpose of providing other kinds of information. Advantages and disadvantages of each alternative strategy are listed below.

The first alternative strategy of relying on the existing system (i.e., enrollment data) is what has traditionally been used. As stated earlier, enrollment data have limited utility for developing a comprehensive, long-range plan for post-secondary continuing education. Therefore, it is not recommended as a proper strategy for long-range planning.

The second strategy of incorporating certain categories of information into the SED system is recommended as a short-range policy only. As the SED system is being developed, it might be possible to suggest important categories of information which might be incorporated without major alterations into the present SED data information system.

It is our belief that the following information categories could become part of a systematic information-gathering process at the institutional level of aggregation. Deans and directors of continuing education could request a sample of participants in their programs to provide the desired information on a recurring basis. Appropriate coding systems could be developed for aggregating this information at the institutional level.

1. Information about the people who constitute the "enrollments." Such data could include: (a) useful demographic data such as sex, race, date of birth, number of years of school completed; (b) perceived needs and interests in continuing education; and (c) suggestions for changes and innovation in program and/or organizational procedures.
2. Information about the instructional activities offered through continuing education and extension units. Such data could include: (a) descriptive data about the program (such as length, number of participants, the educational objectives addressed, mode of instruction, place, etc.); and (b) the instructor's suggestions for changes and innovations in the program and/or organizational procedures. The faculty selected to respond would be chosen on a random sampling basis.
3. Refining the categories pertaining to credentials. At the present time, three sub-categories (credit, non-degree credit, and non-credit) exist. It would seem reasonable that an expansion of these categories would assist the Department and post-secondary institutions to serve all adult learners more effectively. Increasingly, post-secondary education institutions are providing additional alternatives for learning (such as study skill centers, non-traditional studies, competency-based programs) and are revising procedures (such as awarding credit for life and work experience)

that attempt to meet the educational needs of adult students without regard to level of schooling. The distinction between "post-secondary" and "elementary and secondary education for adults" cannot be always and clearly defined because the audience for continuing education involves adults for whom compulsory schooling procedures are not applicable. It is conceivable, therefore, that enrollments in post-secondary education institution programs--particularly in private institutions, in Cooperative Extension, in study skills centers, and in programs serving the elderly and handicapped adults--could lead to:

a. A High School or High School Equivalency diploma

b. An academic diploma or degree at the undergraduate level (A.A., B.A., B.S., etc.)

c. An academic diploma or degree at the graduate or professional level (M.A., M.S., M.D., Ph.D., etc.)

d. A general or vocational diploma

e. A certificate or licensure as a specialist

f. The enhancement of knowledge, skill, or attitudes at the elementary or secondary level without regard to diploma, degree, or certification requirements.

g. The enhancement of knowledge, skill, or attitudes at the college undergraduate level without regard to diploma, degree, or certification requirements.

h. The enhancement of knowledge, skill, or attitudes at the post-baccalaureate level without regard to diploma, degree, or certification requirements.

i. Special or custodial education objectives.

The three categories of information suggested above would provide data about populations and activities not heretofore recognized. The data-collecting procedures would have the advantage of fitting into established patterns of institutional information-gathering patterns of behavior. Thus, it would probably not be necessary to expend vast resources for securing this additional information. The availability of such data could provide a means for relating to other units of the total educational system that also provide education for adults.

The third strategy of integrating the project (or some similar) data-collection system into the SED information system is not recommended at the present time for reasons stated previously. The incompatibility of the two systems at this point in time is the primary reason for selecting another strategy.

The fourth strategy of supplementing the existing SED system output with the project data-collection system is also recommended under certain situations. Several characteristics of this subsystem should be noted. It is obvious that undertaking supplementary studies requires additional financial resources and personal effort. Studies would be undertaken to meet closely defined specific information needs. A variety of specific studies could be conducted over a period of time, thus adding to the knowledge base. Certain studies could be repeated at certain time intervals if needed. At the same time, an ongoing data-collection effort would assist the SED to keep up with changes in society in general and in the State in particular.

For example, individual studies could focus on: (a) the perceived needs and interests of a new or changing client group (such as women returning to the work force, military veterans, members in particular professions, retired adults, etc.); (b) the changing nature of continuing education offerings by various types of institutions (such as two-year colleges;

private, non-profit institutions; proprietary schools, etc.); and (c) the changing nature of continuing education offerings through various media (e.g., educational television, learning resource centers, etc.). The population of instructors could also be queried on a selective basis rather than including all categories of college and university personnel. Thus, the respondents could include only (a) all faculty instructing in continuing education units, (b) part-time and one-time faculty, or (c) all full-time faculty.

The fifth strategy is to use other collection systems. One of the most promising approaches involves a study of total educational activity of adults in New York State. Such a study would utilize sampling techniques used by the U.S. Bureau of the Census and would best be conducted by personal interview. While a study of this nature could involve extensive resources, the study could be restricted to a single political unit of the State, a metropolitan area or a region. Johnstone and Rivera conducted such a study on a national basis and Tough and Coolican use similar techniques with a small number of adults.[1]

One other alternative system was examined by the research team. The idea of systematically inventorying the available opportunities for learning has been or is being explored at the University of Toronto, Pace University, and the Regional Learning Service of Central New York, among others. The primary beneficiaries of these efforts--as seen by the project team--are the adult learner and the counselor of adults. The data are of interest to policy planners in that the number and kind of course offerings serve as one indicator of the interests of adults, particularly if the courses must be paid for by the adult students, and as information about how adult learners are served.

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[1] John W. C. Johnstone and Ramon J. Rivera, Volunteers for Learning (Chicago: Aldine Publishing Company, 1965); Allen M. Tough, The Adult's Learning Projects (Toronto, Ontario: The Ontario Institute for Studies in Education, 1971); Patricia Mary Coolican, "The Learning Style of Mothers of Young Children" (Ph.D. dissertation, Syracuse University, 1973).

A listing of course offerings, however, has limited utility for planning purposes. Such a compilation presents no information about the participants--their characteristics, their prior educational experiences, their expectations, their interests in additional learning, etc. Nor does such a listing explain very much about the community and societal problems that educational programs could address.

In summary, the observations and experiences of the project team support the belief that additional data are needed by SED personnel for developing comprehensive plans for lifelong education. Data need to be collected about the current situation (i.e., "the what is") and contrasted with the perceptions of need (i.e., "the what ought to be") as identified by adult learners, professional adult educators, and policy influencers. Two techniques--the Instructional Activity Survey and the Focus Delphi--were tested for their ability to obtain such data. The implications of the study findings for developing a continuing data-collection system suggest that the SED information system should be supplemented, either by incorporating selected information categories that are compatible into the SED system, or by developing a new subsystem to collect additional data on a regularly scheduled basis. The project data-collection subsystem, with methodological revisions, could be used in this effort.

CHAPTER V

SELECTED POLICY ISSUES IN CONTINUING EDUCATION

The preceding chapters have focused on findings related to the goals of the project. In general, three areas were explored: (1) techniques for describing post-secondary continuing education activity in higher education institutions in New York State, (2) a demonstration of the feasibility of using one technique to collect data pertaining to the needs that continuing education should address, and (3) an assessment of alternative data-collection systems in terms of collecting data for use in developing long-range comprehensive plans for post-secondary continuing education.

The purpose of this chapter is to identify selected policy issues for further consideration and action by individuals and groups charged with providing leadership for post-secondary continuing education in the State. Selected background information is provided for each issue.

Three assumptions were recognized during the process of identifying policy questions. One, the investigators acted on the assumption that the State Education Department was committed to the goal of developing "a comprehensive, long-range plan for post-secondary continuing education that focuses on a system of education that facilitates lifelong learning for all citizens of the State." Two, the act of choosing a course of action is the domain of administrators and policy makers. Thus, the role of the research team has been to collect and present the data. The following policy issues are presented for the consideration of policy makers responsible for post-secondary continuing education. Three, it was also assumed that post-secondary continuing education involves other institutions in addition to the higher education system. Since the data were collected from the faculty and staffs of higher education institutions, the findings can only speak to the higher education phase of post-secondary education. Other policy questions could be derived from different value systems and data from other institutions.

Selected Policy Issues

1. Should educational offerings be expanded for minority group adults?

The evidence showed that smaller percentages of minority group adults were reached through instructional activities than were whites. Since minority group members have also completed fewer years of schooling financed with public funds, it could be argued that greater effort should be directed toward learning activities desired by minority group members than toward those desired by the white majority. The data also showed that minority group members participated more frequently in activities that addressed academic degree objectives for persons 25 and under rather than the educational objectives included in Categories I, II, or III. It may be that minority group members who are actually admitted into higher education institutions prefer degree-credit instruction because of the value of credentials to them, and also because many minority group adults did not have the opportunities to obtain an academic degree previously.

This suggests that opportunities for degree-credit instruction be expanded for minority group members. The trend toward experience credentialling and the provision of realistic counseling services (including improving study skills) also could be increased.

It could also be argued that more degree programs should be available in locations accessible to minority group members rather than staying within the physical boundaries of a campus. While non-credit instructional activities for minority group adults could also be continued and expanded, the data suggest that minority group adults place the higher priority at the present time on academic degree-credit programs. Would participation increase if more space-free and time-free programs were provided?

2. Should educational offerings for older adults be expanded?

The data indicated that older adults were the most inadequately served of all possible target audiences in the State. Since the proportion of older adults in the population increases each year, can the educational institutions afford to ignore this group? Because of the physical, social, and economic limitations of older adults, intensive research and program development could be initiated to learn how to accommodate institutional offerings and supporting services to the needs and interests of older adults.

3. Should non-credit offerings be expanded?

Using the broadest definition of continuing education--credit activities for adults 25 and over and all non-credit instruction for persons 17 and older--continuing education accounted for only one-fourth of all instruction in post-secondary education institutions. Other studies have shown that most adult learning activities involve no academic credit. If post-secondary education institutions accept the challenge of facilitating lifelong education for all citizens of the State, then the adult's preference for instruction without regard to credit or certification requirements needs to be addressed. In other words, adults will seek out both credit and non-credit learning opportunities because of their individual differences, but the greatest number of adults will choose activities that fulfill an interest in learning rather than in receiving academic credit.

4. What is the institution's role in providing supportive and resource services for self-planned instruction?

The almost complete reliance on face-to-face groups as the medium of communication with learners suggests a lack of recognition of and appreciation for the "self-directed learner." Researchers--such as Tough and others previously cited--have documented the magnitude of learning activities that are being planned, carried out, and evaluated by the learner himself. The same studies also show that the self-directed learner needs a lot of assistance from other people. If the post-secondary education system is going to facilitate lifelong learning, then extension research, program development, and administrative support are needed to determine the most appropriate medium of communication, instructional mode, and delivery system that will assist this large audience of learners.

5. Should more educational offerings be offered off the campus?

The instructional activities reported in this study were essentially placebound--in a college, university, or school facility. Continuing education instructional activity occurs in other settings such as government facilities, private homes, and churches. While it may be impossible for the boundaries of a specific campus to be "the boundaries of the state", as is the Wisconsin idea, institutions or consortia of institutions could serve a metropolitan area, a community, or a region. What incentives could be offered to an institution or a consortium of institutions to extend the campus to more storefront locations, more private homes, more community centers, and more retirement centers?

6. Should educational offerings based on societal concerns and problems be expanded?

There appeared to be a concentration of instructional activities in the subject-matter areas of Letters, the Liberal Arts, and certain professions. Conversely, there were few instructional activities that dealt with societal problems, if the number of activities in Social Science, Interdisciplinary Studies, Home Economics, and Public Affairs can be taken as one indicator. If adults seek to control greater portions of their own destinies, can post-secondary continuing education afford to ignore the controversial topics of the period? Instructional activities designed for the improvement of society should not replace instructional activities designed to improve individuals. Rather, the system should offer greater numbers of instructional activities concerning social issues and problems to provide a balance in the kinds of instruction offered. If the post-secondary educational institutions are unwilling or unable to take leadership in dealing with societal change, then can knowledge resources be made available to other institutions that develop educational programs to assist adults in coping with change?

7. Should continuing education offerings to the professions be expanded?

Although certain professions--Education, Health, and Theology--were recipients of extensive instruction, the service across all professions was uneven. Very few activities were reported for adults in Architecture, Engineering, Business and Management, Library Science, Home Economics, and Social Work. Forces, such as the rapidity of technological change and the increasing interdependence among subject-matter specialists in problem solving, need no further documentation. If the continuing education needs of professionals are to be met, then what institution is better prepared or has greater resources for the job than the higher education institutions?

8. Should the existing State Education Department Management Information System be supplemented with additional data?

The investigation found that existing data-collection systems provided some data that would be useful in developing a long-range comprehensive plan for post-secondary continuing education. However, it seems unlikely that such an information system can ever provide sufficient data for planning the future of continuing education. For example, data concerning "needs" were not being collected at the time of the study. Thus, could the present system be supplemented in two ways: (1) by including additional items of information on the current data-collection instruments at a time when such data could be incorporated into the system; and (2) by conducting additional studies which would provide supplementary data about "needs"? The data-collection system could be modified to collect descriptive data on a recurring basis about the current situation (such as the instructional activity survey), and perceptions of needs in continuing education from relevant populations (such as was demonstrated by the Focus Delphi). The Department will also encounter other specific information needs on an infrequent or nonrecurring basis. These data would best be obtained through independent studies. For example, more data are needed about the various ways that post-secondary continuing education is financed.

9. Should the administration of post-secondary continuing education be changed?

Traditional ways of looking at continuing education were found to be inappropriate in today's higher education institution. Changes in definitions of when one is considered an adult and when one is a full-time or a part-time student, and emerging notions about lifelong learning suggest that new administrative divisions of responsibility are in order.

Since the evidence suggests that colleges and universities will continue to be involved in the certification of learning, instructional activities can be divided into two groups: academic credit instruction, and non-credit instruction. Also, it seems reasonable that although many individuals will be able to engage in post-secondary educational activity on a full-time basis, increasing numbers will seek not only traditional, but also space and time-free education, as a secondary activity. The distinctions between academic and non-credit instruction, and between full-time and part-time learners, have important implications for educational practice. Thus, four divisions of responsibility within post-secondary education institutions are possible: (1) academic credit instruction for full-time students, (2) academic credit instruction for part-time students, (3) non-credit instruction for full-time students, and (4) non-credit instruction for part-time students. Much of post-secondary education is now offered in the first category. If the institution chooses to provide opportunities for lifelong learning, could the other three areas become the vehicle for providing post-secondary continuing education for all citizens of the State?

10. Should all areas of post-secondary educational activity be studied?

The preceding nine questions were based on data gathered in a study of instructional activities in higher education institutions. These issues might change if the study had included post-secondary continuing education activity provided by all institutions in the State. Therefore, it seems feasible that in order to develop a comprehensive long-range plan for post-secondary education in New York State, a study of all post-secondary institutions should be made. In addition, a few recent studies have shown that a large part of an adult's learning activity is self-directed. This activity also needs further study in order for post-secondary education to assist individuals in planning, implementing, and evaluating their self-directed learning, and as a basis for identifying educational needs and interests of adults in the State.

Continuing education for adults seems to be emerging as a critical need for our society. Continuing education can serve to prevent informational, and ultimately social, obsolescence among adults. Therefore, can responsible educational policy planners of today ignore the future of continuing education?

APPENDIX A

INDIVIDUALS ASSISTING WITH THE PROJECT

INDIVIDUALS ASSISTING WITH THE PROJECT

1. James Byrnes, Senior Design Specialist, Educational Policy Research Center, Syracuse University Research Corporation
2. Alexander N. Charters, Vice President for Continuing Education and Professor of Adult Education, Syracuse University
3. Harlan G. Copeland, Associate Professor of Adult Education, Syracuse University
4. Michael Folk, Research Associate, Educational Policy Research Center, Syracuse University Research Corporation
5. David Mathieson, Research Assistant, Educational Policy Research Center, Syracuse University Research Corporation
6. Stuart A. Sandow, Research Fellow, Educational Policy Research Center, Syracuse University Research Corporation
7. Roger Sorochty, Research Assistant, Syracuse University
8. Warren L. Ziegler, Co-Director, Educational Policy Research Center, Syracuse University Research Corporation; and Associate Adjunct Professor of Adult Education, Syracuse University

APPENDIX B

PROCEDURE FOR SELECTION OF THE FACULTY SAMPLE

PROCEDURE FOR SELECTION OF THE FACULTY SAMPLE[1]

The basic kit for selection of the sample consists of the following:

a) a list of the degree-granting institutions with the approximate number of full-time faculty in each. (The list used was entitled "Higher Institutions Operating in New York State" prepared by the Division of Higher Education, the New York State Education Department, dated August, 1971.)

b) a table of random numbers

c) a large alphabetic directory of names, (the document "1970 Statisticians and Others in Allied Professions" was actually used)

d) faculty directories for each of the institutions selected in the sample.

The following procedure was followed in selecting the sample:

Each institution was assigned a unique number i (i = 1, 2,...229). Let F_i stand for the number of full-time faculty in institution i. The 229 institutions were listed in decreasing order according to number of full-time faculty.

S_i was assumed to be the number of full-time staff (including faculty) where $S_i = 3 \times F_i$ from which the number of clusters of 20 full-time staff, C_i, was calculated ($C_i = S_i \div 20$) for each of the 229 institutions.

Cumulative totals were assigned, so that each institution was assigned a unique set of serial numbers (e.g., institution number 46 was assigned the numbers 1-347, institution 53 was assigned 348-670, and so forth). The size of a set determines the probability that the corresponding institution will be chosen in the sample. Altogether there were 5599 serial numbers or clusters.

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[1] Prepared by James Byrnes, Educational Policy Research Center, Syracuse University Research Corporation.

It was decided to break the total population of 5589 serial numbers into 28 zones of 200 clusters each and to choose at random two clusters per zone--one for each of two samples. (Two samples were drawn so that statistical estimates could be made for the complete population.) This was done by selecting two random numbers between 1 and 200, which turned out to be "189" for sample 1 and "99" for sample 2. Then for each sample every 200th number was selected starting with the given random number. The serial numbers chosen for sample 1 began with "189" and ended with "5589." Note that:

a) For each sample, one serial number is selected from each of the 28 zones.

b) The probability of selection of a given cluster is 1/200 for each sample, but it is 2/200 = 1/100 that it will be chosen in at least one sample.

c) Any institution which contains 200 or more clusters is chosen with certainty by this technique.

d) If the number of clusters within a given institution is less than 200, the probability of an institution being chosen for at least one sample is the ratio of number of clusters to 100. For instance, institution number 30 had 159 clusters, thus it had 159/100 = 1.59 probability of being chosen, for at least one sample.

Next it was determined which institution each selected serial number was associated with. For instance the first sample serial number was 189. Hence the 189th of the 347 numbers assigned to institution 46 was selected. The second sample number 389, was the 42nd of the 323 numbers assigned to institution 53 (the 1st number assigned to institution 53 was 348, the second was 349, etc.). Also the third sample number, 589, falls within the domain of serial numbers assigned to institution 53 (it is the 242nd), so that two clusters were chosen from institution 53.

Now we are ready to show how the faculty names in the sample are to be chosen. We will do it by way of example, using the sixth sample serial number chosen, (1189), since we have on hand the staff directory for the corresponding institution, Syracuse University (number 211).

There were 157 clusters associated with Syracuse. We are interested in the 76th cluster. We could go directly to the faculty-staff directory of Syracuse, divide it into 157 parts, and take the 76th part, but that would be very tedious to do for each of the forty-seven institutions. Instead we go to a "base" directory, namely the "1970 Statisticians and Others in Allied Professions" directory, which is crammed with 112.5 pages of names. It's easy to divide these pages into 157 parts and find the exact names between which the 76th part lies. The names we desire are between pages 54.7 and 55.4. If we divide pages 54 and 55 into 10 parts (this was done by making a template the size of one page divided into 10 equal parts--in three columns, then overlaying the template on the page in question), we see that the last name before page 54.7 is "Knowler, Lloyd A." and the first name of page 55.4 is "Kosobud, Richard F." A complete listing of the page number boundaries is attached in Table 63.

Table 64 gives a complete listing of the names by institution that form the boundaries of clusters. Note that the boundary names for institution 211 in sample I are "Knowler, Lloyd A." and "Kosobud, Richard F." All that remains is for the sampler to obtain the appropriate names, i.e., those names which fall between the name boundaries listed.

It is possible that some of the institutions may need to provide more than one list of names in order to include all faculty members. If this is the case all names, from all lists, which fall between the indicated name boundaries should be used.

It is also possible that several names in a given cluster will not be names of people the sampler will want to query. For instance, it is estimated that roughly 20% of the names obtained will be from either the secretarial or maintenance staff. The sampler will probably want to determine which names fall into this "unwanted" category before administering the final instrument.

TABLE 63

PAGE SPECIFICATIONS FOR BOUNDARIES

	Sample I			Sample II	
Inst.	Start	Finish	Inst.	Start	Finish
46	62	62.3	46	32.8	33.1
53	15.3	15.6	46	97.6	97.9
53	84.9	85.2	53	53.6	53.9
135	47.7	48.1	135	12.1	12.5
30	25.1	25.8	135	91.3	91.7
211	54.7	55.4	30	102.9	103.6
228	95.8	96.6	228	23.5	24.3
218	37.4	13.8	206	74.3	75.1
153	98.4	99.3	153	18.7	19.6
204	63.2	64.2	20	88.2	89.1
84	67.7	69.1	102	66.7	67.8
66	32.3	33.9	202	5.6	7.1
154	21.6	23.4	167	92.9	94.5
197	62	63.9	100	2.9	4.8
149	1	3.1	207	49.5	51.4
126	108.8	111.1	188	12.5	14.8
199	34.2	36.8	157	35.2	37.6
158	21.7	24.7	144	102.5	105.3
104	78.1	81.3	6	16.6	19.8
209	81.9	85.4	122	106.7	110.1
150	57.3	61.6	208	25.1	29.1
179	87.9	93	163	91	95.5
186	40.7	47.3	224	30.6	36.5
219	98.5	106	80	1	8
42	47.9	57.3	161	65.3	73.3
118	26	38.5	121	57.3	68.6
105	57.3	76.1	1	81.4	97.5
213	1	113.5	168	38.5	76

TABLE 64

THE SAMPLED NAME BOUNDARIES BY INSTITUTION

1	Academy of Aeronautics		
	(2)	Pratt, Robert W.	Stern, Leonard
6	Albany Medical College		
	(2)	Chase, Gerald R.	Cook, Elsworth B.
20	Brooklyn College		
	(2)	Sargent, Thomas J.	Schillmoeller, Edward
30	City College of New York		
	(1)	Doege, Richard L.	Draper, John F.
	(2)	Tryggveson, Rune	Tytun, Alex
42	College of New Rochelle		
	(1)	Hynes, Robert F.	Lamy, Paul G.
46	Columbia University		
	(1)	Lowry, James A.	Lund, Charles W.
	(2)	Stewart, Frank G.	Stoker, D. J.
	(2)	Freersken, Gary K.	Frishman, Fred
53	Cornell University		
	(1)	Carothers, Doris	Carter, Walter H.
	(1)	Robertson, Tim	Rodrigues, Luis H.
	(2)	King, Leslie J.	Kirkpatrick, Robert L.
66	Fordham University		
	(1)	Francis, Almedeo	Gammon, Edward
80	Hofstra University		
	(2)	Aaron, James P.	Beresford, John C.
84	Hunter College		
	(1)	McQuaid, Gertrude C.	Michelsen, Phyllis B.
100	Lehman, Herbert H., College		
	(2)	Andersen, E. Sparre	Babcock, Jarvis M.
102	Long Island University		
	(2)	McFadden,Roger T.	McWilliams, Paul C.
104	Manhattan College		
	(1)	Parl, Boris	Prabhu, N.
105	Manhattan School of Music		
	(1)	Lamy, Paul G.	Oliva, E. L.

TABLE 64--Continuation

118	Mercy College	
	(1) Dropkin, Lester B.	Greenberg, Bernard G.
121	Molloy Catholic College for Women	
	(2) Lamy, Paul G.	Merril, W. J.
122	Monroe Community College	
	(2) Warren, John S.	Wilson, E. W.
126	Nassau Community College	
	(1) White, Mark A.	Wood, Donald F.
135	New York University	
	(1) Hustad, Thomas P.	Inglis, James
	(2) Shah, K. R.	Shaw, Lawrence H.
	(2) Brinks, James	Brown, Bruce M.
144	Pace College	
	(2) Townes, James R.	Virts, John R.
149	Polytechnic Institute of Brooklyn	
	(1) Aaron, James P.	Anderson, Nancy S.
150	Pratt Institute	
	(1) Lamy, Paul G.	Lombardo, Angelo J.
153	Queens College	
	(1) Stromberg, Warren L.	Suyderhoud, Henri G.
	(2) Cobb, Whilfield	Conlon, Mary O.
154	Rensselaer Polytechnic Institute	
	(1) Cucich, George	Deaton, Leonard W.
157	Rochester Institute of Technology	
	(2) Giambra, Leonard M.	Gorman, Aloysia M.
158	Rockefeller University	
	(1) Cummings, Douglas N.	Dietz, Stephen K.
161	Russell Sage College	
	(2) Matalas, Nicholas C.	Nanni, Luis F.
163	St. Bonaventure University	
	(2) Seri, Armand	Soloman, Murray
167	St. John's University	
	(2) Sidrauski, Martha	Smith, Ervin P.
168	St. John Vianney Seminary	
	(2) Greenberg, Bernard G.	Okuma, Akimichi

TABLE 64--Continuation

179	Skidmore College	
	(1) Sanches, Cecilia A.	Siegel, Marilyn
186	State U.C. Ag. & Tech. Morrisville	
	(1) Hamilton, C. William	Huitema, Bradley
188	State University College at Brockport	
	(2) Brown, Bradford S.	Campion, Harry
197	State University College at Oswego	
	(1) Lowry, James A.	Mann, Evelyn S.
199	State University College at Potsdam	
	(1) Garfinkel, Joseph	Goldman, Herbert M.
202	State University Downstate Health Sciences Center	
	(2) Barber, Warren G.	Becker, Walter A.
204	State University of New York at Albany	
	(1) Madsen, Richard W.	Marczynski, Louis F.
206	State University of New York at Buffalo	
	(2) Neville, William J.	Norris, A. G.
207	State University of New York at Stony Brook	
	(2) Jespersen, Howard W.	Kanal, Prakash
208	State University Upstate Health Sciences Center	
	(2) Doege, Richard L.	Eyermann, John G.
209	Suffolk County Community College	
	(1) Puffer, Ruch	Rogers, Pearl B.
211	Syracuse University	
	(1) Knowler, Lloyd A.	Kosobud, Richard F.
213	Tompkins Cortland Community College	
	(1) Aaron, James P.	Zwickl, Oscar
218	University of Rochester	
	(1) Gordesch, Johannes	Gratehouse, Donald R.
219	Vassar College	
	(1) Studdiford, W. B.	Verley, Frank A.
224	Wagner College	
	(2) Fiekowsky, Seymour	Godfrey, Milton L.
228	Yeshiva University	
	(1) Soults, Donald J.	Stage, Albert R.
	(2) Decker, Mercia C.	Detwiler, Louise B.

TABLE 65

COMPOSITION OF SAMPLE BY INSTITUTION

Institution	Total Sample	Focus Delphi Sample	Institutional Survey Sample	Number Selected to Report				
				5wks	4wks	3wks	2wks	1wk
Academy of Aeronautics	11	2	9	0	1	0	0	8
Albany Medical College, Union University	12	3	9	1	0	0	0	8
Brooklyn College, City University of New York	21	4	17	0	0	0	1	16
City College, City University of New York	23	4	19	0	0	1	0	18
College of New Rochelle	9	2	7	0	0	0	0	7
Columbia University	67	14	53	0	0	0	1	52
Cornell University	70	13	57	1	0	1	1	54
Fordham University	16	3	13	0	0	0	0	13
Hofstra University	68	14	54	0	1	1	4	48
Hunter College, City University of New York	17	3	14	0	0	0	1	13
Herbert H. Lehman College	26	5	21	0	0	0	0	21
Long Island University	14	3	11	0	0	0	1	10
Manhattan College	7	2	5	0	0	0	1	4
Manhattan School of Music	26	5	21	0	0	0	1	20
Mercy College	13	2	11	0	0	1	0	10
Molloy College	12	3	9	0	0	0	0	9
Monroe Community College	14	2	12	0	0	0	3	9
Nassau Community College	16	4	12	0	0	0	1	11
New York University	53	10	43	1	1	2	1	38
Pace College	6	1	5	0	0	0	0	5
Polytechnic Institute of Brooklyn	13	3	10	0	0	0	0	10
Pratt Institute	19	4	15	0	0	1	0	14
Queens College, City University of New York	49	8	41	0	1	0	0	40
Rensselaer Polytechnic Institute	8	2	6	0	0	0	0	6
Rochester Institute of Technology	12	2	10	0	1	0	0	9
Rockefeller University	9	2	7	0	0	0	0	7
Russell Sage College	8	2	6	0	0	0	0	6
St. Bonaventure University	3	0	3	0	0	0	0	3

TABLE 65--Continuation

Institution	Total Sample	Focus Delphi Sample	Institutional Survey Sample	Number Selected to Report				
				5wks	4wks	3wks	2wks	1wk
St. John's University	*	*	*	*	*	*	*	*
St. John Vianney Seminary	4	0	4	0	0	0	0	4
Skidmore College	1	0	1	0	1	0	0	0
Agricultural and Technical College at Morrisville, State University of New York	19	4	15	0	0	1	1	13
State University College at Brockport, State University of New York	18	4	14	0	0	0	1	13
State University College at Oswego, State University of New York	10	2	8	0	1	0	2	5
State University College at Potsdam, State University of New York	11	**	11	0	0	0	0	11
State University of New York at Albany	12	2	10	0	0	1	0	9
State University of New York at Buffalo	29	6	23	0	1	1	0	21
State University of New York at Stony Brook	25	5	20	0	0	0	0	20
State University of New York Downstate Medical Center	*	*	*	*	*	*	*	*
State University of New York Upstate Medical Center	91	18	73	1	1	2	1	68
Suffolk County Community College	16	3	13	0	0	1	0	12
Syracuse University	18	4	14	0	0	0	0	14
Tompkins-Cortland Community College	77	15	62	1	1	2	5	53
University of Rochester	14	3	11	0	0	0	0	11
Vassar College	25	5	20	0	0	0	0	20
Wagner College	9	2	7	0	0	0	0	7
Yeshiva University	75	14	61	1	0	0	0	60
Totals	1076	209	867	6	10	15	26	810

* Institution declined to participate in the study.
** Names obtained after Focus Delphi sample was determined.

APPENDIX C

INSTRUMENTATION

SYRACUSE UNIVERSITY

ADULT EDUCATION | SCHOOL OF EDUCATION

105 RONEY LANE | SYRACUSE, NEW YORK 13210
TELEPHONE 315 | 476-5541 | EXTENSION 3031

We invite you to participate in a study of post-secondary education being conducted by the Adult Education Department and Educational Policy Research Center of Syracuse University under the auspices of the New York State Education Department.

The purposes of the study are to describe: (1) the nature and scope of all instructional activities of post-secondary, degree-granting institutions in the State of New York; and (2) the types of individuals, groups, and institutional representatives in the State involved in these on-going programs. This information is being collected to insure that the post-secondary continuing education needs of New York State residents are identified as definitively as possible when future plans for continuing education are being made.

In order to expedite these goals, you have been selected as part of a sample of college and university personnel to provide information about your instructional activity. The purpose of this questionnaire is to obtain an estimate of the amount of time you spend in such activity. Later, we will ask for a more detailed report of your instructional activity for a one-week period during 1972. Certain individuals will also be asked to provide additional weekly reports not to exceed ten.

We hope we may rely on your concern for the future of continuing education to help collect these important data. No information will be sought which is available through other sources. This study has the support and approval of the chief executive officer of your institution. Naturally, all information received will be held in the strictest confidence.

Will you, therefore, please complete the enclosed questionnaire and return it to us at your earliest convenience? If you have any questions, please do not hesitate to write or call a member of the Syracuse research team listed below. It is extremely important to receive your reply even though your current activities are different from those listed in the questionnaire.

Thank you for your cooperation.

Dr. Harlan Copeland (x 3031)
Project Manager

Dr. Alexander N. Charters (x 3421)
303 Administration Bldg.

Mr. Roger Sorochty (x 3031)

Sincerely,

Harlan Copeland
Associate Professor

BSCP Form 1 p.1

Staff Questionnaire

NAME: Mr. Mrs. Miss ______________________________
Last First Middle

COLLEGE OR UNIVERSITY: ______________________________

1. List all academic degrees or certificates earned:
(Enter years received; if none, so state.)

   1. Vocational or Technical Certification ____
   2. Associate Degree (two-year) ____
   3. Bachelors Degree (B.A., B.S., etc.) ____
   4. Masters or similar professional degree ____
   5. Doctorate or advanced professional degree ____
   6. None ____

2. Barring unforeseen events, please estimate the total amount you expect to receive from all wages, salary, fees, grants and fellowships, including tuition waived and self-employment from teaching activities both inside and outside your institution during the calendar year 1971. (Information will be treated confidentially.) Omit investment-type income. (Precision to less than a thousand dollars is not expected.)

$ __________

NAME: Mr. Mrs. Miss ______________________________
Last First Middle

CURRENT BUSINESS ADDRESS: ______________________________
____
______________________________ ZIP

CURRENT BUSINESS PHONE No.: AREA ( ) __________

YOUR DATE OF BIRTH: Month ____ Day ____ Year ________

ADMINISTRATIVE TITLE: ______________________________
(If none, so state.)

For Staff Use

ID ________
SN ________
CN ________
SQ ________
YN ________
RP ________
____
WT ________

RANK OR POSITION: (Check one)

____ Professor
____ Associate Professor
____ Assistant Professor
____ Instructor
____ Lecturer
____ Research Associate
____ Research Assistant
____ Fellow
____ Research Fellow
____ Teaching Fellow
____ Graduate Assistant
____ Teaching Assistant
____ Administrative Assistant
____ Secretarial/Clerical
____ Technician
____ Assistant Instructor
____ Maintenance
____ Other (Please describe)
____

3. Please enter below the best estimate of any amount of time you spent in instructional activities in the areas and time periods listed below. Regardless of whether you donated or were compensated for your services, include instructional activities sponsored either by your institution or by an outside agency even if you met with only one individual. Omit family instruction and instruction undertaken on a one to one basis as a supervisor in a job or profession. If you were not involved in any instructional activity, please indicate this.

	SEPT. 1970 THROUGH AUG. 1971		SEPT. 1971 THROUGH AUG. 1972	
A. Instruction not creditable toward academic degrees (offered either inside or outside institutions of higher education including the mass media).	No. of different weeks of involvement during this period in which you provide some instruction	Estimated total contact hours of instruction during this period	No. of different weeks of involvement during this period in which you provide some instruction	Estimated total contact hours of instruction during this period
1. Instruction in professional and technical knowledge and skills for individuals with previous college work or equivalent experience.	____	____	____	____
2. Technical and vocational instruction for post-high school students with little or no previous college work or equivalent experience.	____	____	____	____
3. Remedial instruction for post-high school students preparing for academic work at the college level.	____	____	____	____
4. Sectarian, moral or religious	____	____	____	____
5. Sports, recreation, hobbies, handicrafts	____	____	____	____
6. Art, drama, music and other cultural development activities	____	____	____	____
7. Home and family life	____	____	____	____
8. Current events, public affairs, and citizenship	____	____	____	____
9. Agriculture	____	____	____	____
10. Other ____________________	____	____	____	____

11. None of the above ____________

	SEPT. 1970 THROUGH AUG. 1971		SEPT. 1971 THROUGH AUG. 1972	
B. Instruction creditable toward academic degrees	No. of different weeks of involvement during this period in which you provide some instruction	Estimated total contact hours of instruction during this period	No. of different weeks of involvement during this period in which you provide some instruction	Estimated total contact hours of instruction during this period
I) Regular Division Offerings				
1. Lower division, undergraduate	____	____	____	____
2. Upper division, undergraduate	____	____	____	____
3. Graduate	____	____	____	____
4. None ____________				
II) Continuing Education Division Offerings				
1. Lower division, undergraduate	____	____	____	____
2. Upper division, undergraduate	____	____	____	____
3. Graduate	____	____	____	____
4. None ____________	____	____	____	____
C. Other				
1. Early childhood instruction	____	____	____	____
2. Elementary level	____	____	____	____
3. Secondary level academic or technical-vocational	____	____	____	____
4. Counseling	____	____	____	____
5. Other (describe) ____________ ____________	____	____	____	____
6. None of the above ____________ ____________				

SYRACUSE UNIVERSITY

ADULT EDUCATION | SCHOOL OF EDUCATION

105 RONEY LANE | SYRACUSE, NEW YORK 13210
TELEPHONE 315 | 476-5541 | EXTENSION 3031

We would like to take this opportunity to thank you for your cooperation in responding to the previous questionnaire concerning the study of post-secondary continuing education in the State of New York. The purpose of that form was to provide a gross estimate of the nature and extent of instructional activity provided by administrators, faculty, and staff of post-secondary degree granting institutions in New York State.

Based upon that information, you have been selected to provide a more detailed description of your instructional activities for the following one week period(s):

The week(s) has been selected randomly. The questionnaire(s) will be mailed so that it will arrive on your desk by Friday preceding the reporting week. The questionnaire accompanying this letter is the first one we would like you to complete.

Hopefully the directions will provide the answers to any questions you may have concerning the completion of the Form. However, if we can be of any assistance, please do not hesitate to contact myself or Roger Sorochty at the above phone number or address.

We realize that providing this information will represent an investment of your time and energy. We sincerely thank you for your efforts and cooperation thus far and look forward to your continued support of the study.

Sincerely yours,

Harlan Copeland
Associate Professor

HGC:fd
Enclosure

SYRACUSE UNIVERSITY

ADULT EDUCATION | SCHOOL OF EDUCATION

105 RONEY LANE | SYRACUSE, NEW YORK 13210
TELEPHONE 315 | 476-5541 | EXTENSION 3031

Some time ago, you were asked to provide some information about the nature and extent of your activity as a teacher. This information is important in increasing our understanding about the nature and extent of post-secondary continuing education in New York State. Your personal response is important because it is representative of approximately 125 other university and college personnel in the State.

The enclosed questionnaire seeks more specific information about instructional activities than we were able to obtain in the first questionnaire. We would greatly appreciate your cooperation in completing this form even though we did not receive a response from you to the earlier questionnaire.

The week(s) has been selected randomly. The questionnaire(s) will be mailed so that it will arrive on your desk by Friday preceding the reporting week. The questionnaire accompanying this letter is the first one we would like you to complete.

Hopefully the directions will provide the answers to any questions you may have concerning the completion of the Form. However, if we can be of any assistance, please do not hesitate to contact myself or Roger Sorochty at the above phone number or address.

We sincerely thank you for your efforts and cooperation and look forward to your continued support of the study. Furthermore, we encourage you to return the initial questionnaire. Should you require an additional copy, please do not hesitate to contact us.

Sincerely yours,

Harlan Copeland
Associate Professor

HGC:fd
Enclosure

Instructions for Completing BSCP Form 2

The reporting unit in this study is an instructional activity. With the exceptions noted in the next paragraph, list ALL of your instructional activities during the week in which you have been asked to report, including Sundays and holidays. Be sure to include instructional activities whether or not they are connected with your primary place of employment. Include any activity which has the DIRECT purpose of improving the knowledge, skill, or sensitivity (attitude) of an individual, group or mass audience.

Omit the following kinds of activities: 1) research, 2) preparation of research reports for publication, 3) any personal learning activities, 4) instruction of family members and 5) instruction related to your employers, employees and subordinates supervised by you, or to other job-related colleagues within your own institution.

Include all other instructional activities ignoring any distinction between formal or informal and time and space restrictions; whether associated with an educational institution or not; and whether no, one, or several learners were present. For example, you should report activities such as: 1) designing, creating, writing, filming or recording instructional material, 2) tutorial activity, 3) consultative activity when it is primarily "instructional".

You need not name each activity. Describe each activity by entering the appropriate code numbers from the attached code sheets in the spaces provided on the Form. While information about the time that the activity took place is desired, the study is not a time-use study. So, the form does not have to account for all of your time during the reporting period.

If you meet a class or group of students more than once a week for the same general purpose, record each meeting as a separate activity during the reporting week. You will note that the information provided in columns 2, 3, 4, 5, 6, and 13 may be different for each of these similar-type activities.

We suggest you examine the example entered on the first line of Form 2 and the explanation accompanying these instructions. When you are satisfied that you understand the nature of that activity, proceed by supplying information pertinent to your own instructional activities. The reporting week begins on Monday and ends with the following Sunday.

Instructions for Compleing BSCP Form 3

Please complete one form for each instructional activity you have listed on Form 2. Because of the difficulty in estimating the number of these forms you would require, we may not have included enough. Please contact us if you require any additional material.

When you have recorded all of your instructional activities for the reporting period, return the questionnaire in the attached envelope. If you encounter any questions, please telephone either Harlan Copeland or Roger Sorochty at (315) 476-5541, ext. 3031.

Explanation of the Example Given on BSCP Form 2

The instructional activity used in the example occurred October 17 beginning at 9:00 a.m. and lasted 50 minutes. There were 80 learners (participating in the activity).

The experiential and formal education prerequisites (columns 6 and 7) and the objectives (column 8) refer to those set by the instructor, not the student. Therefore, in the example, the instructor felt that the learners participating in the instructional activity should have achieved functional literacy and completed nine to eleven grades of school.

Likewise, the instructor chose number 4 from Code List C as the objective because he was not addressing diploma, certification or degree requirements. This does not preclude individual learners from setting different objectives.

The medium of communication used by the instructor is indicated as being a live audio-closed circuit broadcast (number 6 in Code List D). We have chosen this category for the example since it could consist of such procedures as an amplified telephone hook-up between several points. The other categories should be self-explanatory. It should be mentioned that an activity in which you used a computer as an instructional aid should be coded number 9 in Code List D while an activity in which you designed material for later use with a computer should be coded number 1 in Code List D.

The instructional mode used was coded number 2 from Code List E since two-way communication was involved in a discussion.

The content categories in Code List F are purposefully general. Many subjects, such as group dynamics for instance, could be included in two or more categories. If this type of situation occurs, it is suggested that column 11, the content of the instruction, be coded in a manner that will indicate the primary subject area in which the instructional activity is offered. In the example, code number 23--theology--was used since the discussion focused on Judeo-Christian values.

Columns 12 through 17 are used to identify sources of support for the instructional activity from Code List G. In the example, support (financial, facilities, time) was provided by 4 institutions and/or individuals. A religious organization (number 21) provided the most, a private non-profit educational institution (number 12) provided the next greatest amount in terms of facilities, the instructor provided the third most (number 01) in terms of his time and the learners (number 02), through a small fee, provided the least. Although space is provided to indicate as many as six sources of support, there need not be six.

In column 18, the number indicates that there were 4 different sponsors (individuals and/or institutions). While there is space to indicate 6 sources of support, there may, of course, be more.

The direct source of your remuneration or recipient of your time is identified in the example as a religious organization in column 19. The word direct is emphasized, indicating the institution or individual who actually provided the remuneration directly to you or was the direct recipient of your voluntary contribution. Remuneration may be received in a variety of forms such as money, tuition remittance, etc.

In column 20, the instructor reported that he provided the instruction without fee or as a voluntary activity.

The instructional activity took place in a college which has the amplified telephone network capability.

REPORT ON INSTRUCTIONAL ACTIVITIES DURING THE WEEK OF:

BSCP Form 2

ID ____________
SN ____________
CN ____________
SQ ____________
REP ____________
WT ____________

____
Name of Respondent

____ ____ ____ through ____ ____ ____
mo. day yr. mo. day yr.

1	2		3			4		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	Date		Time Activity Began			Length of Activity		Number of Learners	Prerequisites For Learner Participation		Instruction Characteristics				Support Characteristics									Place of Activity
									(Enter from Code List*)						(Enter from Code List*)									Enter from Code List*
									*A	*B	*C	*D	*E	*F	*G							*G		*H
ACTIVITY NUMBER	MONTH	DAY	HOUR	MINUTE	AM or PM	HOURS	MINUTES	Enter number present If none, so state	EXPERIENTIAL	FORMAL EDUCATION	OBJECTIVES	MEDIUM	MODE	CONTENT	Indicate by code the types of institutions and/or individuals contributing direct and/or indirect support in money, time or space. Include voluntary contributions. (Rank from most to least.)						Number of different direct and indirect sponsors. (Listed in Code List G.)	DIRECT institutional source of your remuneration or recipient of your time, if voluntary.	Was this a voluntary activity for you? (Voluntary means you received no remuneration). (Enter yes or no).	
															1	2	3	4	5	6				
Ex.	10	17	9	00	AM	0	50	80	2	3	4	6	2	23	21	12	01	02			4	21	Yes	1
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								

CODE LIST A

Experiential Pre-requisites Needed by the Learners To Receive the Instruction

CODE

1 ..... None (i.e. literacy skills not required)

2 ..... Functional literacy (acquired knowledge and skills in reading and writing which allows one to effectively engage in activities in which literacy is normally assumed)

3 ..... Basic vocational training or experience comparable to high school experience

4 ..... Understanding of Arts, Sciences, or Humanities comparable to high school experience

5 ..... Study or experience in vocational, technical or professional areas comparable to the associate degree (i.e. two years of college)

6 ..... Understanding of Arts, Sciences, or Humanities comparable to the associate degree (i.e. two years of college)

7 ..... Technical or professional study or experience comparable to the baccalaureate degree

8 ..... Study or understanding of Arts, Sciences, or Humanities comparable to the baccalaureate degree

9 ..... Advanced technical or professional study or experience comparable to a master's or first professional degree

10 ..... Advanced study or understanding of Arts, Sciences, or Humanities comparable to a master's or first professional degree

CODE LIST B

Amount of Formal Education Required by the Learners to Receive the Instruction

CODE

0 ..... No credentials or years of schooling required

1 ..... Completion of 1 to 7 grades of school

2 ..... Completion of 8 grades of school

3 ..... Completion of one or more grades from 9 to 11

4 ..... Completion of 12 grades of school

5 ..... Completion of 1 year of college

6 ..... Completion of 2 years of college

7 ..... Completion of 3 years of college

8 ..... Completion of a 4-year college degree

9 ..... Completion of an advanced degree or first professional degree beyond

CODE LIST C

Educational Objectives and Credentials Addressed by the Instructor

CODE

1 ..... Addresses instructional objectives leading to an academic diploma or degree (High School Equivalency, B.A., M.S., M.D., etc.)

2 ..... Addresses instructional objectives leading to a general or vocational diploma

3 ..... Addresses instructional objectives leading to certification or licensing as a specialist

4 ..... Addresses instructional objectives designed to enhance general knowledge without regard to diploma, certification or degree requirements

5 ..... Addresses instructional objectives focusing on specific individual or institutional problems or interests without regard to diploma, certification or degree requirements

6 ..... Addresses remedial or basic preparation objectives without regard to diploma, certification or degree requirements

7 ..... Addresses special or custodial education objectives

8 ..... Other (describe briefly on the reverse side of BSCP Form 2)

CODE LIST D

Communications Medium Used by the Instructor

CODE

0 ..... Writing an evaluation of performance (e.g., instructional correspondence)

1 ..... Writing or designing instructional material (for use by learners for any medium including those listed below and for independent study)

2 ..... Broadcasting: Live TV -- open reception*

3 ..... Broadcasting: Live TV -- closed circuit*

4 ..... Broadcasting: Recording TV tape (exclusively for delayed use)

5 ..... Broadcasting: Live audio -- open reception*

6 ..... Broadcasting: Live audio -- closed circuit*

7 ..... Broadcasting: Recording audio material (exclusively for delayed use)

8 ..... Filming

9 ..... Addressing individuals face to face alone or in groups (exclusively)

*Whether or not also recorded and whether or not live audience was also present.

NOTE: An activity in whcih you watched a film with students or heard a recording should be coded 9 above, not 7 or 8.

CODE LIST E

Instructional Mode Used by the Instructor

CODE

1 ..... Lecture, exposition or demonstration (including media use)

2 ..... Seminar, dialogue or discussion

3 ..... Workshop, lab, or the supervision of experiential learning (simulation, role playing, field trip, internship, etc.)

4 ..... Combination of 1 and 2 above

5 ..... Combination of 1 and 3 above

6 ..... Combination of 2 and 3 above

7 ..... Combination of 1, 2 and 3 above

CODE LIST G

Contributors of Direct and/or Indirect Support

INDIVIDUALS
CODE

01 ..... Self

02 ..... Student participants

03 ..... Other individuals

INSTITUTIONS
CODE

11 ..... Public educational institutions (schools, colleges, residential schools)

12 ..... Private non-profit educational institutions (schools, colleges, residential schools)

13 ..... Private profit-making educational institutions (proprietary schools)

21 ..... Voluntary associations: religious

22 ..... Voluntary associations: professions

23 ..... Voluntary associations: other (civic, fraternal, health and welfare, youth, etc.)

31 ..... Community agencies: libraries

32 ..... Community agencies: museums

33 ..... Community agencies: health and welfare

41 ..... Cooperative (Agriculture) Extension

51 ..... Government agencies: city or county

52 ..... Government agencies: state

53 ..... Government agencies: federal (including military)

61 ..... Business and industry

71 ..... Labor unions

81 ..... Mass media (including both commercial and educational

91 ..... Foundations

CODE LIST F

Subject Matter of Instruction

CODE

01 ..... Agriculture and Natural Resources

02 ..... Architecture and Environmental Design

03 ..... Area Studies (e.g., East Asia, Middle East.)

04 ..... Biological Sciences (including Biochemistry and Ecology)

05 ..... Business and Management (including Business Administration)

06 ..... Communications

07 ..... Computer and Information Sciences

08 ..... Education (including educational psychology, philosophy of education, and educational administration)

09 ..... Engineering

10 ..... Fine and Applied Arts (including Photography, ceramics, weaving, etc.)

11 ..... Foreign Languages

12 ..... Health Professions

13 ..... Home Economics

14 ..... Law

15 .... Letters (including Linguistics, Speech, Philosophy)

16 ..... Library Science

17 ..... Mathematics

18 ..... Military Sciences

19 ..... Physical Sciences

20 ..... Psychology

21 ..... Public Affairs and Services (including Social Work and Public Administration)

22 ..... Social Sciences (including economics, geography and political science)

23 ..... Theology

49 ..... Interdisciplinary

50 ..... Recreation (Sports, games)

51 ..... Other

CODE LIST H

Where Activity Took Place

CODE

0 ..... Church or Synagogue

1 ..... School, college, residential school, extension center

2 ..... Federal, state, county or municipal government facility

3 ..... Cultural facility (non-government, non-profit)

4 ..... Voluntary association facility

5 ..... Commercial facility (including hotels)

6 ..... Broadcasting facility

7 ..... Labor union facility

8 ..... Place of business

9 ..... Private home

10 ..... En route

11 ..... Other

____
Respondent's Name

Reporting Week ___ ___ ___ thru ___ ___ ___
Mo. Day Yr. Mo. Day Yr.

BSCP Form 3
ID ________
SN ________
CN ________
SQ ________
RP ________
WT ________

1. Activity Number: ________
(From Column 1 of Form 2)

2. Number of Learners Present: ________
(From Column 5 of Form 2)
Indicate whether this number is an:
____ actual or ____ estimated amount

3. Enter below the normal learner fee (tuition) for this activity even though some learners be exempt from the fee and indicate the approximate unit to which the fee applies. If there is no fee, please indicate this.

Normal Student Fee: $ ________ None ______
Unit: (check one)
______ per semester credit hour
______ per quarter credit hour
______ per each 60 minute clock hour
______ per each 50 minute clock hour
______ per meeting (of no uniform length)
______ access fee (for multiple meetings of no uniform length)
______ other (please describe) ____________________________
____

4. Of the total number of learners present (entered in item two above) enter the number which belongs in each of the following categories in the appropriate space below. (Where large numbers of learners were present, enter your best estimate.) The totals on lines A, B, C, and D should be the same as the number given in Item 2 above.

LEARNER CHARACTERISTICS

Sex	Male	Female	ENTER NUMBER OF LEARNERS IN EACH CATEGORY					
A.								
Racial Group	American Indian	American Oriental	Black American	Spanish Surnamed	Caucasian	Other		
B.								
Age	Under 17	17 – 24	25 – 34	35 – 44	45 – 54	55 – 64	65 and over	
C.								
Prior Years of School Completed	None	K – 7	8	9 – 11	12	13 – 14	15 – 16	over 16
D.								

5. Who participated in planning the instructional activity?

1. ______ The instructor, primarily
2. ______ The participants, primarily
3. ______ The sponsoring institution(s), primarily

______ a combination of 1 and 2
______ a combination of 2 and 3
______ a combination of 1 and 3
______ a combination of 1, 2 and 3

APPENDIX D

MATERIALS USED IN FOLLOW-UP WITH NON-RESPONDENTS

SYRACUSE UNIVERSITY

ADULT EDUCATION | SCHOOL OF EDUCATION | CRAWFORD CONTINUING EDUCATION CENTER

105 RONEY LANE | SYRACUSE, NEW YORK 13210
TELEPHONE 315 | 476-5541 | EXTENSION 3031

The person(s) to whom the enclosed memorandum(a) is(are) addressed has(have) not returned Forms 2 and 3 of the study of post-secondary continuing education. These data are extremely important since the conclusions of the study will be derived from them.

After discussing the best way to encourage a response, it was felt that a note from you would prove most successful. We have taken the liberty of enclosing the memo(s) for you to send, in order to place as little demand on your time as possible. Please feel free to rewrite the memo as you see fit.

We would be most grateful if you would date and sign the memo(s) and see that the person(s) concerned is(are) notified as soon as possible.

I cannot emphasize enough the importance of receiving these data. Your efforts are most appreciated.

Sincerely,

Harlan Copeland
Associate Professor

HGC:d
Enclosure(s)

MEMORANDUM

To: Date:

Subject: Study of Post-Secondary Continuing Education

Dr. Harlan Copeland, Project Director for the Study of Post-Secondary Continuing Education, has asked me to check if you received the forms for reporting your instructional activity for a one-week period. The reporting forms were distributed approximately two weeks ago. As of today, your response has not been received.

I would like to encourage you to return the information requested since your response represents approximately 125 college and university personnel around the state. Furthermore, the study has the approval of the chief executive officer of our institution.

Please contact me or a member of the Syracuse Project Staff directly if you have any questions or need additional forms. If your reply is already in the mail, please disregard this memo.

On behalf of the Syracuse University Project Staff and myself, thank you for your cooperation.

Sincerely yours,

SCHOOL OF EDUCATION - SYRACUSE UNIVERSITY

Memorandum

TO:

DATE:

SUBJECT: Study of Post-Secondary Continuing Education

FROM: Harlan Copeland

We were unable to reach you concerning your response to our study. We would be most appreciative if you would check the category below which best describes your situation and return this memo in the enclosed envelope.

___ I would like to respond for the week of June 26 through July 2. Please send additional forms.

___ I am usually involved in instruction but was not during the above week.

___ My duties do not involve instruction.

___ Other (Please describe.)

Thank you.

APPENDIX E

NUMBER OF RESPONSES TO THE INSTRUCTIONAL ACTIVITY SURVEY

TABLE 66

NUMBER OF RESPONSES TO THE INSTRUCTIONAL ACTIVITY SURVEY

Week No.	Gross Mailing	No. not Reached	Number[1] Reached	No. Declined[2] to Respond	No. of Respondents	No. of Non-Respondents
1	26	6	20	3	13	4
2	15	1	14	1	10	3
3	18	4	14	2	12	0
4	22	5	17	4	12	1
5	18	2	16	5	9	2
6	15	3	12	3	4	5
7	21	2	19	3	11	5
8	18	1	17	2	10	5
9	12	2	10	1	5	4
10	24	0	24	3	18	3
11	17	3	14	1	11	2
12	19	1	18	1	8	9
13	17	3	14	0	9	5
14	15	1	14	1	8	5
15	14	0	14	0	10	4
16	17	2	15	2	7	6
17	19	2	17	1	7	9
18	18	2	16	3	11	2
19	17	1	16	0	11	5
20	14	2	12	0	9	3
21	9	0	9	0	7	2
22	28	1	27	2	17	8
23	23	0	23	0	13	10
24	19	3	16	1	11	4
25	31	2	29	0	19	10
26	25	6	19	1	9	9
27	14	2	12	1	5	6
28	15	2	13	1	7	5
29	25	3	22	3	9	10
30	18	3	15	2	4	9
31	27	5	22	3	6	13
32	18	1	17	1	8	8
33	19	3	16	1	8	7
34	15	0	15	3	7	5
35	18	1	17	0	8	9
36	31	2	29	3	15	11
37	19	2	17	2	5	10
38	19	0	19	0	9	10
39	10	2	8	0	2	6
40	15	1	14	2	6	6
41	21	3	18	2	8	8
42	15	2	13	2	6	5
43	26	2	24	3	16	5
44	17	2	15	0	7	8

TABLE 66--Continuation

Week No.	Gross Mailing	No. not Reached	Number[1] Reached	No. Declined[2] to Respond	No. of Respondents	No. of Non-Respondents
45	11	3	8	0	5	3
46	14	2	12	1	7	4
47	18	4	14	0	5	9
48	24	7	17	3	9	5
49	19	3	16	1	5	10
50	27	2	25	2	11	12
51	20	0	20	3	8	9
52	11	1	10	1	4	5
Totals	977	113	864	80	461	323

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[1] Includes persons in the sample who were deceased, had left the University, were on sabbatic leave, and whose letters were returned by the post office.

[2] Includes persons in the sample who were reached and returned questionnaires indicating they were too busy or refused to participate in the study for various reasons.

APPENDIX F

PROCEDURES FOR ANALYZING THE DATA

PROCEDURES FOR ANALYZING THE DATA

The total faculty-staff population was partitioned into 28 paper zones (call them zone 1, zone 2, . . ., zone 28) of 200 clusters each. For each zone i (i=1, 2, ..., 28) two samples were chosen. If we use the subscripts 1 and 2 for the two samples in zone i, then the results may be summarized as

X_{i1}, X_{i2}, for the two X-populations (e.g., the X-populations might be the number of students taught in a non-degree credit program),

Y_{i1}, Y_{i2}, for the two Y-populations (e.g., the Y-populations might be the number of faculty and staff who taught in a non-degree credit program).

Usually we need estimates:

A: the total X-population in the entire set of institutions

B: the total Y-population in the entire set of institutions

Ø: the ratio A/B

For example, A might be the total number of students who were taught in non-degree credit programs during the sampling period by faculty and staff at degree-granting institutions, while B is the total number of faculty and staff who taught in a non-degree credit program. The symbol Ø denotes the ratio A/B, the average number of students per teacher over this time interval.

The sample provides estimates of the results that would have been obtained from a complete census of all faculty and staff, with the same questionnaire as was used in the sample, during the same period of time. For an estimate of the ratio Ø we may take

$$f=X/Y$$

in which X is the total X-population in the entire sample, both 1st and 2nd samples combined; Y has a similar definition for the total Y-population in the sample.

To obtain estimates of a total population (e.g., A above) it was necessary to calculate the weights corresponding to each response in the sample. Since the estimates were to be for a year, each respondent's (one week) description of activities was multiplied by fifty-two, with some exceptions: for those who reported more than one week's activities the quantities were weighted correspondingly less. For example, if a person reported two weeks, his results were multiplied by 52 ÷ 2 = 26 to get the corresponding estimate of a full year's activities for him.

Next, it was necessary to determine how many real faculty members each respondent "stood for." This was done by dividing the estimated total number of faculty and staff in New York State (100,000) by the number of respondents (375). Thus, each respondent stood for 100,000 ÷ 375 = 266.67 respondents. Multiplying this by 52 (for 52 weeks) gives 13866.67 man weeks per year which each sample respondent stood for.

The survey was originally designed so as to allow for a fairly exact estimate of the potential variance in the estimates from the true values.[1] However, a number of factors caused the size of the sample of activities to be much smaller than anticipated, and thus rendered such an analysis of variance unreasonable. These factors are discussed elsewhere in the report, but can be summarized here.

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[1] The experimental design which permits this analysis is based upon procedure described by W. Edward Deming in "On Simplifications of Sampling Design through Replication with Equal Probabilities and Without Stages," The American Statistical Association Journal, (March, 1956).

Of the original sample of 867, only 375 (43%) gave 461 valid responses. Of these 375 individuals, only 105 (28% of the respondents; 12% of the original sample) reported any instructional activities for the assigned weeks. It should be noted, however, that the reporting periods included holidays and vacation periods and the sample included administrators and non-teaching staff.

In all, 668 valid instructional activities were reported, and of these some were not valid for certain categories of information primarily because of missing data.[1] Considering the fact that in some cases the set of activities was divided into as many as 216 distinct categories, it is obvious that the intended analysis of variance would not have lent any useful information to the results of the study.

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[1] This accounts for the fact that some of the grand totals in different tables differ somewhat. For the objective vs. subject-matter tables, for instance, only 631 of the 668 reported activities were valid.

APPENDIX G

DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS IN CATEGORY II AND CATEGORY III INSTRUCTIONAL ACTIVITIES

TABLE 67

DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS IN CATEGORY II INSTRUCTIONAL ACTIVITIES

(in percentages)

Sex	Male	Female						
A.	52.9	47.1						
Racial Group	American Indian	American Oriental	Black American	Spanish Surnamed	Caucasian	Other		
B.	0.0	1.8	5.3	2.5	90.1	0.4		
Age	Under 17	17 – 24	25 – 34	35 – 44	45 – 54	55 - 64	65 and over	
C.	1.8	12.7	47.0	23.0	10.6	4.6	0.3	
Prior Years of School Completed	None	K – 7	8	9 – 11	12	13 – 14	15 – 16	over 16
D.	0.0	0.0	0.4	0.5	16.0	9.8	20.1	53.2

TABLE 68

DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS IN CATEGORY III INSTRUCTIONAL ACTIVITIES

(in percentages)

Sex	Male	Female						
A.	45.4	54.6						
Racial Group	American Indian	American Oriental	Black American	Spanish Surnamed	Caucasian	Other		
B.	0.19	1.77	4.96	2.07	90.65	0.35		
Age	Under 17	17 – 24	25 – 34	35 – 44	45 – 54	55 – 64	65 and over	
C.	1.16	49.60	27.12	13.26	6.05	2.64	0.16	
Prior Years of School Completed	None	K - 7	8	9 – 11	12	13 – 14	15 – 16	over 16
D.	0.0	0.38	0.22	0.55	25.04	31.75	12.38	29.68

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